InPACT

International Psychological Applications Conference and Trends

PROCEEDINGS

Edited by:
Clara Pracana

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BRIEF CONTENTS

FOREWORD

Dear Colleagues,

We are delighted to welcome you to the International Psychological Applications Conference and Trends 2014, taking place in Porto, Portugal, from 4 to 6 of April.

Psychology, in our time, offers a large range of scientific fields where it can be applied. The goal of understanding individuals and groups (mental functions and behavioral standpoints), from this academic and practical scientific discipline, is aimed ultimately to benefit society.

Our International Conference seeks to provide some answers and explore the several areas within the Psychology field, new developments in studies and proposals for future scientific projects. Our goal is to offer a worldwide connection between psychologists, researchers and lecturers, from a wide range of academic fields, interested in exploring and giving their contribution in psychological issues. We take pride in having been able to connect and bring together academics, scholars, practitioners and others interested in a field that is fertile in new perspectives, ideas and knowledge. We counted on an extensive variety of contributors and presenters, which can supplement our view of the human essence and behavior, showing the impact of their different personal, academic and cultural experiences. This is, certainly, one of the reasons we have many nationalities and cultures represented, inspiring multi-disciplinary collaborative links, fomenting intellectual encounter and development.

InPACT 2014 received 326 submissions, from 31 different countries, reviewed by a double-blind process. Submissions were prepared to take form of Oral Presentations, Posters, Virtual Presentations and Workshops. It were accepted for presentation in the conference, 92 submissions (28% acceptance rate). The conference also includes a keynote presentation from an internationally distinguished Emeritus Professor Carlos Amaral Dias, BSc(Hons), MD, PhD, C. Psychol., FBPsS, Full Professor in the University of Coimbra, Director of Institute Superior Miguel Torga and Vice-President of the Portuguese Association of Psychoanalysis and Psychoanalytic Psychotherapy, to whom we express our most gratitude.

This volume is composed by the proceedings of the International Psychological Applications Conference and Trends (InPACT 2014), organized by the World Institute for Advanced Research and Science (W.I.A.R.S.) and co-sponsored by the respected partners we reference in the dedicated page. This conference addressed different categories inside Applied Psychology area and papers are expected to fit broadly into one of the named themes and sub-themes. To develop the conference program we have chosen six main broad-ranging categories, which also cover different interest areas:

- In **CLINICAL PSYCHOLOGY**: Emotions and related psychological processes; Assessment; Psychotherapy and counseling; Addictive behaviors; Eating disorders; Personality disorders; Quality of life and mental health; Communication within relationships; Services of mental health; and Psychopathology.

- In **EDUCATIONAL PSYCHOLOGY**: Language and cognitive processes; School environment and childhood disorders; Parenting and parenting related processes; Learning and technology; Psychology in schools; Intelligence and creativity; Motivation in classroom; Perspectives on teaching; Assessment and evaluation; and Individual differences in learning.

- In **SOCIAL PSYCHOLOGY**: Cross-cultural dimensions of mental disorders; Employment issues and training; Organizational psychology; Psychology in politics and international issues; Social factors in adolescence and its development; Social anxiety and self-esteem; Immigration and social policy; Self-efficacy and identity development; Parenting and social support; and Addiction and stigmatization.

- In **LEGAL PSYCHOLOGY**: Violence and trauma; Mass-media and aggression; Intra-familial violence; Juvenile delinquency; Aggressive behavior in childhood; Internet offending; Working with crime perpetrators; Forensic psychology; Violent risk assessment; and Law enforcement and stress.

- In **COGNITIVE AND EXPERIMENTAL PSYCHOLOGY**: Perception, memory and attention; Decision making and problem-solving; Concept formation, reasoning and judgment; Language processing; Learning skills and education; Cognitive Neuroscience; Computer analogies and information processing (Artificial Intelligence and computer simulations); Social and cultural factors in the cognitive approach; Experimental methods, research and statistics; and Biopsychology.

- In **PSYCHOANALYSIS AND PSYCHOANALYTICAL PSYCHOTHERAPY**: Psychoanalysis and psychology; The unconscious; The Oedipus complex; Psychoanalysis of children; Pathological mourning; Addictive personalities; Borderline organizations; Narcissistic personalities; Anxiety and phobias; Psychosis.

The proceedings contain the results of the research and developments conducted by authors who focused on what they are passionate about: to promote growth in research methods intimately related to Psychology and its applications. It includes an extensive variety of contributors and presenters, who will extend our view in exploring and giving their contribution in educational issues, by sharing with us their different personal, academic and cultural experiences.

The authors of selected best papers will be invited to submit extended versions of their papers after the conference for possible journal publication in the following journals:
- Universal Journal of Psychology
- PsychNology Journal

Authors will also be invited for inclusion of their extended works in a book published by an international Open Access publisher, inSciencePress.

We would like to express thanks to all the authors and participants, the members of the academic scientific committee, our sponsors and partners and, of course, to our organizing and administration team for making and putting this conference together.

Hoping to continue the collaboration in the future,

Respectfully,

Clara Pracana
Portuguese Association of Psychoanalysis and Psychoanalytic Psychotherapy, Portugal
Conference and Program Chair

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KEYNOTE LECTURE

FROM PSYCHOANALYSIS TO PSYCHO-ANALYTICAL PSYCHOTHERAPY, FROM PSYCHO-ANALYTICAL PSYCHOTHERAPY TO PSYCHOANALYSIS

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Abstract

The relationship between Psychoanalysis as clinical practice and Psychotherapy is neither linear nor straight-forward.
In point of fact, Psychoanalysis both as theory and practice started with the so-called transference neuroses which had a huge importance in the works of Sigmund Freud. In a way, this was unavoidable since the creator of Psychoanalysis had as "office mates" a substantial number of neurotics, some of whom helped to create the newly founded science: Dora, Little Hans, the Rat Man, the Wolf Man, among others.
Another "fellow companion", Schreber, was not a visitor to Berggasse 19, Vienna, but made it possible to understand and treat those individuals who due to their characteristics cannot lie on the couch but need psycho-analytical help.
This communication is an elaboration a posteriori (Nachträglichkeit, afterwardsness) of the long path of Psychoanalysis.

Keywords: Psychoanalysis, Psycho-analytical Psychotherapy, Freud.

1. The origin of psychoanalysis and the concept of the unconscious

Psychoanalysis was created by one single person: Sigmund Freud. Its method is recent, having little over one hundred years. In this sense psychoanalysis is the newest of sciences. The objective of this communication is to attempt to understand how psycho-analytical psychotherapy and psychoanalysis have developed in the past, how they may be developed in the future and how they relate.

At the time Freud's work was beginning, hypnosis was the most used technique in the academic and professional context. It matters to ask how Freud went from hypnosis to psychoanalysis; that is, how he evolved from hypnotic suggestion to conceiving the unconscious, which means creating a view of the mental functioning and psychic life, that in turn radically re-sends us to the unconscious.

The concept of unconscious was not new, and the period when Freud initiated his own discussion of the issue was a very productive one, both scientifically and culturally. Mental phenomena were being intensely questioned and the concept of unconscious was emerging. For instance, both Janet and Ribot used it. However in Janet the concept of unconscious is strongly impoverished. Even the actual word that he used to designate unconscious - subconscious - indicates an impoverishment of the psyche. This view of the unconscious can also be observed in his theoretical constructions, in which he created words such as asthenia (which means without strength), which indicates a negativist view of the unconscious. Negativist because it considered that the use of the unconscious was an impoverishment of the psychic functioning. In Ribot's work the concept was far more philosophical than operative and did not contain these clinical issues, given that he was mainly a theoretical psychologist.

Hence in historical terms on the one hand there was a caldron from which the

unconscious had emerged, and on the other a clinical practice that had initiated a progressive disengagement from the organic perspectives, which had dominated psychiatry and all psychopathology up until the end of the 19th century, or early 20th century. Psychiatry and psychopathology were based on the dominant organicist and biological perspectives. As is the case of German organicist psychiatry, lead by Kraepelin, Kretschmer and also in French psychiatry, which was also very strong and used assumptions based on a biological view of mental phenomena.

However at those times the first ruptures with the dominant knowledge and practice were those derived from the use of hypnosis in treating patients with psychiatric or psychological problems; firstly and fundamentally the case of what was designated at the time as hysteria. Hysteria could be best translated as *mysterya,* since *hysterium* evokes the uterus and mystery means "closed uterus". What really interested Freud was not so much the hysterical phenomenon, but more so the mystery phenomenon: that closed uterus, that mystery which contained the phenomenon designated as hysteria. Hysteria interested many people then, including Charcot, Freud, and many others.

Hysteria being specially pathoplastic, at the time a hysterical seizure was considered like an epileptic seizure, "the great sickness" (in French, le grand mal). Charcot described hysterical symptoms as being very similar to epileptic symptoms. With one exception: the "stuff" that came out of hysterics when in crisis - the improprieties and indecent words - a symptom which epileptics did not manifest. The latter bit their tongues and urinated. Well, these "epileptics" didn't bite their tongue. On the contrary, they loosened it and said the most inconvenient things! Freud saw something that was happening in hysteria and not in epileptic seizures.

The simple fact that hypnosis was starting to have a place in psychiatry at the time, along with some other interesting techniques, such as faradaic currents - electric currents which do not provoke a shock - thermal treatments, etc., is very significant. Those treatments were reserved for symptoms which doctors knew would only have a suggestive effect on the central nervous system. These thermal treatments, faradaic currents and hypnosis point to another way of looking at the mind. The hysteria of anxiety, which is often wrongly designated as a panic attack, becomes an interesting and progressive demonstration (both in the field of psychiatry and in the field of psychology) of the existence of phenomena which would escape a biological enunciation. In other words, the biological hypothesis was contradicted by clinical practice. However that wasn't necessarily accepted by all, for example Charcot, who was a great hypnotizer and a fantastic lecturer. Young Freud worked with him in Paris in the winter of 1875-76.

Hysteria was found in two large groups of people: the lower classes - the peasants - and the upper classes - "les femmes de Paris", who sighed and fainted. At the time the motives for fainting were much discussed: some blamed the tight corsets made of whale whiskers, others noted that they would only faint in the presence of a man.

At the time it was not easy to accept that what was being observed could not be exclusively due to an organic causes. Charcot himself, one of the most celebrated hypnotists along with Bernheim, was among those who did not accept this, although he had clearly realized that this illness, hysteria, was something else. Nonetheless he could not accept that there was not an organic cause to justify it.

Freud was the first to understand that there was not an organic cause. When he returned from Paris and started to practice hypnosis, he realized that something radically different was taking place. After verifying that the hypnotized individual couldn't remember anything said during hypnosis, and also that under pressure the individual could remember a few things, he wondered about the place where those memories had gone: if memories are in the mind, disappear and come back, where have they been? And this is how Freud created a basis for something called the unconscious.

2. The unconscious and the narrative of absence

After assuming the unconscious, Freud started to build a perspective on and around this notion and its progressive complexity. In time he would connect the unconscious to a different phenomenon: the narrative. The notion of unconscious is hence conceived as a process or an instance of the mind, not merely a place of the forgotten or repressed. But the repressed, which is what begins to organize the unconscious, is a kind of narrative. There is a narrative, a part of the mind totally related to personal history, which is subjacent to its own discourse. Freud listened to the stories of his patients as a narrative in what which is heard is not exactly what is told.

For Freud it was an extraordinary breaking point, upon which it is always worth reflecting, a sort of *Nachtraglichkeit,* meaning an aprés-coup, a posteriori, a deferred action, which is the notion of double temporality or of the double inscription of the self: inscribed in the present time but simultaneously inscribed in a past time (that is, constantly returning to a past time). This circularity of time is a fundamental Freudian notion, a revolution of the scientific conception of time, and it emerged when Freud began to create a view of the unconscious as place where narratives are inscribed.

The narrative Freud refers to is, however, a curious narrative because it is a narrative of an absent character; a narrative which is not constructed by what is there - but rather by what is absent. It is a narrative constructed by what is absent from the patient's speech. And it is from this absence that Freud reassesses the history of the person, a history that in turn sends back to the issue of childhood. It is not by chance that this happens. Freud does not send us to the issue of childhood departing from some paradigm, an imperative with a sense of a priori in Kantian terms, but simply because his patients spoke of it, because the return to family, childhood, is inevitable. Family is the most conservative human instance. Why? Because we bring in ourselves the biological inheritances of each member of the family, along with relational heritage, that is the heritage of the relationship with the human beings that were father and mother. This makes us, without realizing, constantly reproduce something which comes from the place where we grew up. All this comes from those two beings, mother and father; it is from this pair that we receive our biological making, identifications and modes of functioning. This is why family is purely conservative.

Freud rises up against this family conservatism. The most relevant issue about family to us, psychotherapists of analytical orientation and psychoanalysts, is the way family is organized *in the mind*. Freud comes to the conclusion that the unconscious is the place where absence is inscribed - the absence of the father or the mother - as something that took place, which is not tolerable to the mind, which the mind cannot process and is hence trapped inside.

3. Freud's capacity of negative realization and concealment

Freud's mental view of the unconscious is quite a curious matter: initially, through hypnosis, observations are made that lead Freud to progressively understand its complexity. This was only possible due to Freud's great capacity for *negative realization* (Bion's term after the poet Keats), which is the capacity to tolerate the frustration of not understanding immediately. For example, it was Emmy Von M. who first said, "Let me speak". But Freud understood that "let me speak" is another place for the person to find other levels and *meta-level*s of human speech. This is how psychoanalysis was concealed, or hidden - and not found. Psychoanalysis is not something one discovers, it is a process one conceals. There is always a stain or a thin layer. As Sandor Radò says: the most one can do is to "scratch" the unconscious. We do not have access to the ontological of the species, to this ontological being, this radical being. We have access to all that comes from the individual through language, which is precisely why, Emmy Von M. said to him "let me speak".

4. Psychoanalysis and the couch: Exorcising after-effects

The discovery of psychoanalysis is not the discovery of the couch. The couch is an after-effect of the psychoanalytical technique. Freud created the concept of psychoanalysis, but he only had his patients lay down much later on, for this simple reason: being tired of being looked at for several hours a day, he decided to invite them to lay down on the couch. Freud created the idea of the couch to facilitate his own life and not because it was related to a specific way of looking at the other. There are in fact advantages for the psychoanalyst in patients laying down, because a certain "at ease" is gained from not being looked at, given that our face is so intensely studied by the patient, when attempting to know what we are thinking and so on. However, some fundamental thing is generated when a person lays down on the couch. This later led Freud to define the classic analytical technique: the exorcism of the body.

The body is exorcised because it becomes only spoken of. Even the body of the analyst goes somewhere else. And so, what is the place of the body when the patient as a body, and the other (the analyst) as a body, are absent from their bodies? Either intervenient in analysis possesses a body. However this body is not important, not for one nor the other. There is a body but what matters is what the body speaks of, in the sense that language is a pseudo-type of the corporeal self. We speak in order to generate metaphors for the body. Language is an inscription of the absent body. And the inscription of the absent body brought great advantages to psychoanalytical investigations. In other words, an accident, - and often knowledge is generated this way - creates knowledge and technique. Freud was surprised when he had patients lay down and realized that changed many things: changed their attitude and their speech. Furthermore, often language is muted and patients not knowing what to say does already contain something. That is, it contains the repressed, it contains something the individual cannot yet speak of. Language within the setting of the couch begins to divert into other directions and allowed for fantastic discoveries.

5. The couch, the regression and the other speech

The couch drives a person to regression, but the manner in which each analyst deals with regression is different. The couch is a regression because people lay down and say whatever comes into their heads, and are invited to take a journey through their own words, which will perspectivate the unconscious' register - "speak, say" - in the sense that the goal of free association is to break down censors. Even the posture itself, to be lying down next to someone sitting down, convokes something childish, infantile, a base metaphor - "an adult who is caring for someone laying down". Hence it can be understood that the couch generates a regressive action.

But to say that it generates a regressive action is very different from saying that the couch generates regression merely though the subjacent technique. No! The couch only generates a regressive action. One enters a peculiar state, between vigilance and dream. People on the couch can comment on a painting on the wall, or even on other things that may appear anecdotic, however these remarks amplify the sense of communication with the patient and that of the patient's with the analyst. The muted language and this technique drove fundamental discoveries. Because this absence of the inscription of the body, when amplifying the scope of language, made Freud realize that the whole sense of what the patient speaks of can be found in the patient's language. Furthermore this pushed Freud to understand that suddenly there is another form of speaking.

6. The forbidden incest and freedom, the being's complaint and being the complaint

But even more potential can be reached by the couch technique. The couch reproduces the forbidden incest. You can say everything, but you cannot do anything. It

reproduces the forbidden and at the same time authorizes it. The couch is a place where the individual is, or seeks to be, through various forms, and the analyst must confer the freedom for the individual to be - if not, he or she is not an analyst! The analyst is an individual who allows the other to be or to *become*. Which is not easy because people come with complaints, but in fact nobody wants to abandon their complaints, because those complaints *make* the person, *are* the person!

The freedom given to speech, to language, is something else. But at the same time it organizes a space: a space where "you are", "you can say", but "your speech" has no sensoriality.

7. The couch, space and sensoriality

The relationship between sensoriality and the couch is an interesting issue. Is there or not sensoriality in the analytical session? It seems to me that at the beginning and ending of each session, perception comes back and consequently, the analyst must still be there, and hence there is no way of not being there, and so there is no way of not being sensorial for the patient. And there is also no way of preventing the patient from re-inscribing the relationship with the analyst in the place where he or she is understood, visible.

Therefore where is the body of the analyst, which becomes an absent body? It remains in the voice as a metaphor for the body and in the space the analyst proposes. The analyst, even without realizing, when organizing one's workspace and preparing oneself for work, is constantly saying, "this is me", "I am this way"! The body of the analyst is the space he puts forth. Not just the couch, but also the whole space, the nature of the space.

It's not worth considering that a space could be neutral. Trying to achieve that could mean a totally white space, a white couch, not a single book, a white desk! Anyone coming in to such a space may say the psychoanalyst is schizophrenic!

It is not an issue that such a space is a part of us. We are always two: one who listens and one who is. But since we can't *be* when with our patients, we can't speak of ourselves. Let us imagine the following: The patient complains of a phobia and the analyst responds "when I was seven I had the same phobia", etc.! No! The analyst erases oneself as a person in speech but inscribes oneself through the imaginary body that is proposed. The analyst erases oneself from the speech where the patient is not, becoming merely someone who listens, becoming listing itself, while at the same time the analyst is someone who is inscribed as a person in what he or she suggests and proposes.

8. The couch erases and psychopathology inscribes

The consequence of the discovery of the couch was, in historical terms, the amplification of psychopathology. Hysteria was amplified to obsessive neurosis, from obsessive neurosis to depression. Freud began to realize issues of another nature, as what caught his attention initially was neurosis (Freud dedicated many texts to this topic). And so Freud begins to understand many other things, and at a point these things - and this is perceptible to his disciples - no longer "fit" on the couch. For example, Freud's view of psychosis is perceptible in the analysis of the autobiography of the "Schreber Case", in the text titled "Neurosis and Psychosis" or in many other works, which he dedicates to psychosis.

It is clear that the theoretical comprehension derived from the couch, amplifies psychopathological comprehension and this happened with Freud and after Freud, with, for example, borderline pathologies (which Freud never described) which are pathologies that we are increasingly discovering do not "fit" on the couch. This is very interesting: psychoanalys created a technique that erases the body (the absent body) but then discovers, with time, that the body must be re-inscribed. The body is obliterated and creates a technique where it is obliterated.

9. From psychotherapy to psychoanalysis, from psychoanalysis to psychotherapy

The body is merely a metaphor through language. The discovery of serious pathologies, which do not support the couch technique, namely because of the sensorial disengagement it provokes, augmenting or sharpening more primitive phenomenon of the mind, has pushed analysts to undergo a sort of transition: from psychotherapy to psychoanalysis, from psychoanalysis to psychotherapy.

What started by being an absence of the body, then forced its presence, because in many people there was a radical intolerance to absence; absence of looking, of perception; there was a need to *see*. Not to see whether the analyst has an ugly or pleasant face.The person wants to see the body in an attempt to re-situate oneself in the relationship with someone who can perceive or see them. If the body on the couch is a regressed body, the body face-to- face is a body that cannot further regress. A body that does not tolerate any regression, for the regression was already such that to make them regress further is intolerable.

The question is: Why is face-to-face so necessary for certain people?

10. Face-to-face: what it is to be seen

If not to evaluate our gaze among other reasons of perceptive order, then why? It is as if the child within us cannot be satisfied with the sound perception of the analyst's voice, and needs to see the therapist, to really *see* him. If we think in Bion's terms, it is as if the person needs the conception and not the concept. I must see you in order to be sure you see me. In this case people enunciate the problem in the following manner: "I see you so that you see me." As the Spanish say: "El ojo que ves no es ojo porque tu lo veas, es ojo porque te ve", that is, the eye that sees is not an eye because you see it, but because it sees you.

This gaze that "sees the other" is what is necessary. It is necessary for these people "to see that they are seen". There is a peculiar transition from a body that is absent to a body that is presented. But this was done through the absence of the body. The psychoanalytical process itself showed that some people had the need to be seen. Because "the evil eye" is what they see when they don't see us. They need "the kind eyes" from the one who sees and receives. In this sense when seeing in face-to-face, it is like a mirror's reflection.

Winnicott said: "the first mirror of a child is the mother's eyes". Meaning: How do I live within you? Why is that? Because the sentiment of the object's representation was not sufficiently solidified. In the text "Two principles of mental functioning", Freud refers that the transition from *Ego-Pleasure* to *Ego-Reality* was not sufficiently successful; in other words the intermediation between reality and psyche was not sufficiently established. When Freud writes that "nothing in fantasy gives more than what reality can give", it is clear how the *Ego-Reality* mediates between external reality and psyche.

11. Facing a non interpolated and non mediated reality

Many human beings look at their reality and feel that it gives them nothing. Schizophrenics have close relationships with their psychotherapists, psychoanalysts and mothers, and that is it! A vast majority of them have no more than this! Borderline personalities live in a border world, in which others barely exist. Primary masochists are also impoverished, it's terrible! These people, what do they have? A psychotic may say that never made love to a woman, or that was never touched by another human being, or to have never touched another body, etc. Does reality give anything to these people? No! And why not? Precisely because there was no interpolation of representation. There was none, and so nothing of it remained.

And this is why when analysts begin to realize this, they start to understand some other issues. They began to understand that these people don't create enough mental

representations of reality, that their relationship with reality is merely one of projection, that there is no psychic skin, that the relationship between self and reality was based on primitive projections, primary projections. And so these analysts returned to a face-to-face technique. This was the path: from face-to-face to the couch, and then discovering that face-to-face was necessary.

12. The emancipation of psychoanalysis; beyond the couch

Psychoanalysis was discovered on the couch as an opening to psychopathology and it rediscovered itself in the face-to-face. It returned to face-to-face due to an imperative that was born from the actual act of analysing. Hence we can say that this return also emancipated psychoanalysis from its own imaginary process. That is, the couch is a way of communicating with the patient, face-to-face is another way of doing so. But what was generated by psychoanalytical research was a theoretical body, a conceptual body, which can now be applied in and out the analytical field, in what concerns the couch technique. This is something distinct. It is about how the therapeutic work is inscribed in a face-to-face relationship or how it is inscribed on the couch.

13. Psychotherapy: an emergent technique

Presently, I can say - and I have been practicing psychoanalysis for thirty years- that it is possible to do psychoanalysis while walking the streets. I can remain an analyst while having coffee. But why? Because this is part of my own nature. It is no longer just a profession, it has become a *pro-faith*: a profession, an act that is close to faith. Faith that I can communicate with someone who allows me to do so, in a register that is no longer of common sense.

This new emergent technique contains an amplification of the psychoanalytical theories but already lives in a curious, self-sustaining way, feeding on what it discovered by itself and in addition to what psychoanalysis had discovered.

It is nonetheless obvious that the manner in which a patient speaks face-to-face is not the same as on the couch.

14. The inscription of absence in presence; common sense and the internal vision

It is necessary to inscribe an absence. When face-to-face, where can absence be inscribed? It is not inscribed by the theory of Ramses II, which reduces us to mummies!!! It is inscribed through the compass, the rhythm, that is given for the other to speak. I practice in many ways: face-to-face, psychoanalytical psychodrama, psychoanalysis. But at no point do I stop being an analyst. Because my comprehension is based on a theoretical and conceptual field, that was generated and created by listening in a different way. So where is the absence? It is in that different hearing. What is absent? The language of common sense, which becomes absent in the way we communicate with the patient.

15. The discipline of knowledge and the disciplined abandonment of knowledge

The construction of an internal vision refers to what to Bion conceived as being the relationship between K and F, Knowledge and Faith. As a I see it, an interpretation is an act of faith. Why is it an act of faith and why should it be an act of faith? How does a person communicate? What makes us speak? It is something imperative that is born with ourselves. And so it is an act of faith. How is an act of faith created? One can only create an act of faith by firstly increasing K. If we do not create knowledge, knowledge, and more knowledge, we are incapable of an act of faith.

Because an act of faith is the disciplined abandonment of knowledge.

If K does not increase, if we do not increase our capacity for dealing with psycho-analytical theories we cannot clearly understand what they mean; if we don't assimilate the concepts, if we don't reflect upon them, if we don't integrate them within us, they remain mere theories. The act of faith is only possible through the disciplined abandonment of knowledge. In psychotherapy, what is necessary is to augment knowledge, amplify K.

16. A knowledge that only exists beyond intuition

Therefore, one can only return to intuition, which is an act of faith, after knowing. don't believe in the intuition of psychotherapists or analysts. Not at all! The place where intuition can exist is the place where we know something, far beyond intuition. A place where the inscription of what psychoanalysis and psycho-analytical theory are, is part of our blood, body and mind. This knowing that takes place inside us - we need nothing else. This is the procedure of the training to be a psychotherapist.

Being a psychotherapist is something one can only initiate when one understands the motive for Grotstein's question: "Do I dare disturb the universe?". Meaning, do I have the right or audacity to disturb someone's universe? We do have that right whenever someone has inscribed us there:" Hey you! Come and disturb my universe!", "don't cure my universe".

17. Between doubt and the audacity to disturb the universe: learning with patients

We begin by being psychotherapists or psychoanalysts when we become a disturbing factor, and disturb someone's universe. But in order to become a disturbing factor, we need to be a factor. That is, not an unknown variable, but a known variable. In our profession it is hardwork to be a known variable. But this is a hardworking profession, especially on account of the internal work it requires. And given that it is a hard job we can sometimes have moments of disbelief, of doubts about our ability. Often we question ourselves if it is worth it, whether it is not an invention, if it in fact can do any good.

We must be able to have all these doubts in order to reconcile ourselves with all that comes with this job. This is the only way. That is why this coming back to face-to-face is an example of learning with our patients. Patients do not learn with us, it is we who learn from them. Furthermore, if one does not learn from one's patients, patients are bound to learn nothing either. Personally, whenever I begin a session with a patient - at this point in my life - I ask myself, what am I going to learn today? There are moments when one does not wish to learn, or simply cannot. If we idealize our capacity for learning then we are the worst psychotherapists and psychoanalysts. Tolerance to doubt is positive and even more so is tolerance to the sense of infinite, but we are not always able to reach such tolerance.

To follow this path is to learn that one is beginning a life's work, for one's entire life, and which transforms us, changes us. It is not innocuous - it changes us! We are other people, we become other people. And that is why in this circularity between analysis and psycho-analytical psychotherapy and between psycho-analytical psychotherapy and psychoanalysis, as factors of double enrichment, there is a third who has enriched itself: the therapist.

18. On the absent in psychoanalysis and psychotherapy

Sometimes people ask if, after all, is face-to-face what distinguishes psychotherapy from psychoanalysis. The answer is no. Pychoanalysis has been expanding its the theoretical corpus and that in turn brought back face-to-face. The big

issue is how to inscribe what is not inscribed, that is, how to create a third, the absent. This absence must be inscribed whether through looking or on the couch. And that can only be accomplished once one has assimilated theories and concepts that allow seeing beyond sight and hearing, beyond what is said.

19. A co-construction beyond and besides the couch

What I mean by this is that psychoanalysis is a science that exists beyond and besides the couch. It does not exist only on the couch. It exists in anthropology, in history, in many areas of knowledge, in so many places... It exists in face-to-face with the same theoretical body that emerged from the couch, but went beyond it - and became something else. Psycho-analytical therapy is a way of learning with knowledge that emerged from the couch. It allowed for example, Kernberg, to discover many things connected to borderline pathologies, which today can be integrated in psycho-analytical theory and can be worked on the couch.

Who are the patients sent to psychotherapists? Often the most regressed, complicated patients. The psychotherapist is rarely entailed to an even tiny neurosis!

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Brief Biography

Emeritus Professor Carlos Amaral Dias is currently Director of Instituto Superior Miguel Torga, Vice-President of the Portuguese Association of Psychoanalysis and Psychoanalytic Psychotherapy, Invited Professor of the Doctoral Programme of Mental Health in University of Porto, besides his position in University of Coimbra, Portugal, where he completed his PhD in Clinical Psychology in 1981. He is also a private practitioner of psychiatry and psychoanalysis.
In the past, Emeritus Professor Carlos Amaral Dias was a member of the Editorial Committee of the International Journal of Psychoanalysis and of the International Review of Psychoanalysis, and Chairman, Teaching Committee, Trainer and Superviser analyst in Portuguese Society of Psychoanalysis.
With many books published since 1979, Emerirus Professor Carlos Amaral Dias is a marking presence in the Portuguese cultural context, and has been collaborating regularly with several prestigious journals and newspapers and also radio and television.

MATTERS OF THE HEART: A PSYCHOLOGIST'S EXPERIENCE OF ACUTE LIFE-THREATENING ILLNESS, SURGERY AND ICU PSYCHOSIS

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Abstract

The author has a track record of research and publication in relation to psychological aspects of anaesthesia, surgery and critical care. Unexpectedly he became seriously ill following a routine catheter ablation for arrhythmia in November 2012, requiring open heart surgery on the 28th December 2012, followed by 14 weeks of intravenous antibiotics. Prior to the surgery he suffered acute delirium and then following the surgery he suffered from an ICU psychosis.
In this talk the author will reflect on his experiences and their origins from a psychological and personal perspective.

Keywords: Delirium, ICU psychosis, Subjective experience, Patient perspective, Heart surgery.

Brief Biography

Michael Wang is Professor of Clinical Psychology in the School of Psychology, College of Medicine, Biological Science and Psychology, University of Leicester, and Honorary Consultant Clinical Psychologist in Anaesthesia, Critical Care and Pain Management at Leicester Royal Infirmary. He is also Director of the Doctoral Clinical Psychology Training Course at Leicester. Previously he was Professor of Clinical Psychology at the University of Hull and completed his training and qualifications in Manchester. He is a former Chair of the Division of Clinical Psychology of the British Psychological Society. He has worked as a clinical psychologist for more than 30 years, treating patients with PTSD, anxiety disorders, depression, obsessional compulsive disorder, and in particular, psychological problems arising from unplanned anaesthetic and surgical incidents. He has worked closely with anaesthetists in both clinical and research contexts for more than 20 years. In 2004 he organized the 6th International Symposium on Memory and Awareness in Anaesthesia and Intensive Care, and has published numerous papers and book chapters on this topic. He was made a Fellow of the British Psychological Society in 1999 in recognition of this work. He is also a Fellow of the Royal Society of Medicine.
He has been invited to give numerous keynote lectures by the Association of Anaesthetists of Great Britain and Ireland (London 2004,2005,2006,2008, 2009), the Royal College of Anaesthetists (London 2008, 20010), the Yorkshire Association of Anaesthetists (Hull 2008, York 2010) , the Northern Ireland Association of Anaesthetists (Londonderry 2011), European Society of Anaesthesiology (Amsterdam 2011), Slovenian Society of Anaesthetists (Ljubjana 2012) World Congress of Anaesthesiology (Buenos Aires 2012) Japanese Society of Anaesthesia (Fukushima 2012) and at successive International Symposia on Memory and Awareness in Anaesthesia (New York 2001; Hull 2004; Munich 2008; Milwaukee 2011).
He has written invited chapters in anaesthetic texts and is an invited co-author of a forthcoming Cochrane review on the prevention of anaesthetic awareness. He is a member of the joint RCoA/AAGBI working party on anaesthetic awareness (NAP5) which will report in 2014 and a member of the specialist Diagnostic Advisory Committee on Depth of Anaesthesia Monitoring of NICE (2011-2012).

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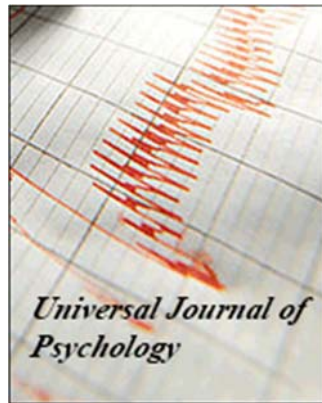
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THE DEFINITION OF MAGICAL THINKING:
BASIC ASPECTS AND POSSIBLE CLINICAL IMPLICATIONS

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Abstract

One possible definition of what is magical thinking will be attempted with an emphasis on non-causality, on Jungian synchronicity theory, on the presentation of unpublished experimentation with one oracle, plus the Freudian implications on the matter, and how all this can have a bearing on the understanding of the concept of magical thinking itself and, indirectly, on mental disease.

Keywords: Analytical Psychology, I Ching, Magical thinking, Psychoanalysis, Schizophrenia.

1. Introduction

Magical thinking was the mode of thought on which the study of British anthropologist Edward Evan Evans-Pritchard (1902-1972) concerning witchcraft, oracles and magic among the Azande tribe of the nowadays Sudan nation, was based. His pioneered Ph.D. thesis, and his related most famous book subsequently published in 1937, showed how this particular way of thinking affected the common daily life of the Azande people. In this paper I will sketch out the workings of this way of thought in the human mind, how it explains misfortune for the Azande people, and what consequences are brought about by the interpretations given through magical thinking to a whole range of real life situations, that might include magical thinking in the condition of one positive symptom in schizophrenia and other psychiatric disorders.

Firstly, an attempt to a definition of what is magical thinking: magical thought has been a peculiar moral process by means of which a hidden meaning has been conferred on one real life event that consists in an outcome brought about by the confluence, both in space and in time, of two or more independently caused phenomena. Then, we are faced with independent or separate phenomena that can be explained ordinarily by different causes, but with the phenomena evolving in parallel so that at a certain point they give rise to a distinguishable event that becomes so because of the concurrence of the independent causal chains meeting somewhere and somehow under the observer's eyes. The new event emerges in the intellect witnessing it as a significant coincidence with an occult meaning, the hidden meaning becoming evident for the observer just because of the coincidental final event. Hence, an acausal connecting principle has supposed to be in operation making the bridge between *a priori* unrelated phenomena but in such a way that all of these, nevertheless, become evident when they yield the significant coincidence. This general (but simultaneously startling and eerie) pattern giving rise to specific meaning under unique circumstance, has been dealt with by Swiss psychiatrist Carl Gustav Jung (1875-1961) in his seminal 1952 paper under the title *Synchronicity: an acausal connecting principle.* Jung (1952/1985) concludes in favour of the empirically observable pattern of events conducive to new meanings in people's lives experiences, patterns that are coherently illuminated by the synchronicity theory and by synchronistic interpretations. In terms of Western civilization and of orthodox scientific

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worldviews synchronicity has not been one endorsed theory to explain non-causally arisen events, leaving room for explanations provided by concepts like that of chance or randomness attributable to singular phenomena, unexplainable by the current tenets and, because of this very last reason, not worthy of having any numinous or emotionally charged meaning whatsoever. But for the Azande people these kind of coincidences are constantly interpreted under the light of their witchcraft theory if some sort of evil is perceived as attached to the events. These folk assume that such coincidences are invariably connected to evil forces and their source must be checked up on witches. So, a moral principle has been implicated here for them. But who are witches for the Azande? They are individuals who by virtue of unknowable reasons have the power to negatively affect in a psychical way third parties, and this faculty makes the latter suffer loss or damage, like for instance, misfortune in daily life, disease or even death. The nature of the influence is supposed to be psychokinetic, that is, a mind over matter effect by means of which the mind of the witch directly affects the material life of the victim. Witches do not practice magical rituals, do not possess magical crafts, in opposition to medicine man. They may be plain neighbours in the same village. To fight against witchcraft the Azande consult oracles and diviners, and use magical drugs; these procedures always intended for to take revenge on behalf of the victims, and for this reason magic and witchcraft among the Azande have permanently been associated with evil forces and the rage of retaliation. This has been the morality stance imbuing with their magical thinking. Obviously, this moralistic attitude has not been pertaining to a scientific appreciation of the phenomenon of significant coincidences as it has been worked out by philosophers and by psychologists.

Let us consider one typical example for the Azande people: in a hot summer afternoon some villagers take shelter under the shade inside of a hut; termites had been eroding the wood on the roof of the hut; the roof eventually collapses while the people were relaxing under it and some of the villagers become badly wounded or eventually dye. So, clearly the two independent chains of events, with separate causations, converge into a singular bad event with a heavy social significance. It is this last feature that triggers off the character of a significant coincidence for the resultant event that, following, becomes one social issue, amenable to a peculiar interpretation under the concept of a theory for witchcraft that it is socially acceptable for those people. The theory explains misfortune in general, and gives the Azande tribesman a stereotyped and quick way of thinking in face of any bad luck. But magical thought it is not one particular moral process exclusively. It is also a mental frame that causes specific behaviours, namely to urge on revenge. Consultation of oracles and magical rituals have a social value for the Azande and they are components of the behaviours associated with magical thinking. For the people concerned witchcraft is omnipresent in their daily life and has been a *leitmotiv* that justifies the consultation of oracles and the additional procedures based on magical thought. Hence, these aspects are a part of their common lives, leading the natives to regard the peculiar behaviours and motivations for them as trivial phenomena. As a matter of fact, witchcraft is not considered in awe of the supernatural and overriding forces controlling life but with anger or rage, with an urge on retaliation against evil doers and undercover forces. These persons do not consider that there is an unbridgeable gap between natural events and the supernatural or paranormal. Neither do they proclaim a natural philosophy to elucidate by natural law the relations between cause and effect that can be observed repeatedly. But one should notice that they do not generalize the mystical causality (another name for non-causality) implied in witchcraft to give a full explanation regarding physical phenomena. When explaining disease caused by witchcraft their civilization's deficiency does not preclude them from avoiding mystical causation regarding the natural phenomena portion. The theory is only called upon when explanations by means of natural causes have been exhausted. Witchcraft is basically a putative concept that involves personal agents, albeit holding supernatural powers, to

materialize specific instances of misfortune, loss or damage, disease and death, for which the knowers of the event cannot realize the sole concurrence of natural causes. It is at the level of significant coincidences that the Azande way of thinking introduces a peculiar mode for explaining the events, namely that phenomena chained to each other but belonging to separate causes can eventually converge to produce an evilly event to identified individuals or groups of people, and the ensuing explanation is provided by the witchcraft theory. This becomes one link in the gap that for Western civilized thought has been filled in by chance, good luck or bad luck, randomness, where these find their roles to play. Mystical causation and natural causation are, then, not mutually excluded in the thinking of the Azande. For instance, when discussing the death of one person they do understand that there would be natural reasons for the death, but they also consider that witchcraft's associated mystical causality was an adjuvant factor adding to the lethal outcome. This is so because for the Azande death has been not just a natural occurrence but a social issue as well, and it has been at this last level that mystical causes have been and can become implicated. In the situations of misfortune that strike these folk it is the social relevance of the situation that determines the invocation of witchcraft (plus its mystical causality) as definitely involved, *ipso facto*, with the determinism of one death or other kinds of loss. Natural as well as paranormal causes can be simultaneously associated in a bad happening. Unfortunately the Azande do not proclaim one doctrine of witchcraft. Their relations with witchcraft are more practical and not analytical. They understand the connection between a cause and its effect under natural circumstance, but they also add witchcraft to their natural philosophy of living in order to explain the coincidences with a significance of misfortune, loss or damage. The Azande react against witchcraft, and fight it off, not theorizing extensively about what has been at stake. The theory stands for a justification of what has been used to fight against evil forces grounded on magical procedures. The concept pretends to explain the why of the occurrence of significant coincidences, bad in meaning, rather than to explain how the phenomena that gave rise to the coincidences unfolded and eventually coalesced harmfully to a certain point in space and in time. There resides the explanatory function of their intellect. The pristine way (at the time of the Pritchard's anthropologic enquiry not yet contaminated by a positivist and exclusively rationalist worldview such as in current Western common sense) of magical thinking featured in the Azande's thought will be highlighted and cleared up by means of this still contemporary, albeit scientifically unorthodox, oracular tool that curiously also bases its functioning on magical thinking.

2. Experimental section of the paper

The *I Ching* is an old book of oracles. It was devised more than three thousand years ago in China. Modernly, the *I Ching* can be faced as a database of ancient wisdom. The oracular material is organized in sixty-four records named hexagrams. These sixty-four hexagrams of the *I Ching* are very abstract symbols that depict the same number of archetypal situations. The abstract symbols have a high level of generalization and integration of any information probed with the oracle. The sixty-four hexagrams consist of specific six lines figures and their particularly associated sections of text. The lines referred to are either opened or whole, and eventually also with the possibility of changing or transforming into their opposites. This last pair is the pair of moving lines. So, there are four species of lines to constitute the hexagrams. Throughout the book the sections of oracular text are distributed in fields that are constant. For example, *The Judgment*, *The Commentary on the Decision*, *The Image*, *The Lines*, and so on, are regular fields throughout. These fields or sections compose the oracular material and contain specific lines of text that differ from hexagram to hexagram. The text under the title *The Lines* pertains to each of the six independent lines that make up the different hexagrams. To access the oracular information from the *I Ching* a ritual must be performed. This ritual consists of the operation of a random

event generator, namely, the tossing at random six times of three identical coins and taking note of the tails and heads upward, or, alternatively, the laborious and chance division of forty-nine yarrow stalks (*Achillea millefolium*). The outcome of these rituals can be a single, closed hexagram, or a set of hexagrams that are chained by their so called moving lines. Next, I will abridge one oracle drawn from the *I Ching* in the context of a question pertaining to the topic of magical thinking, the oracle composed of two hexagrams connected by one moving line.

The ritual by the coins was performed and yielded two hexagrams, the first entitled *Holding together* or *Union* (number 8 in the book of changes) and the second with the title *Difficulty at the beginning* (number 3 in the book of changes) the first or initial line (bottom line in the hexagrams) chaining the transformation of the former into the latter of the hexagrams. For the first hexagram its *Miscellaneous notes* read "Holding together is something joyous" (Wilhelm, 1951/1989; p. 425). In the deeply symbolic language of the oracle joyous means, in this case, sortilege. Next, in *The judgment* of the hexagram one reads "Holding together brings good fortune. Inquire of the oracle once again whether you possess sublimity, constancy, and perseverance; then there is no blame. Those who are uncertain gradually join. Whoever comes too late meets with misfortune" (*ibidem*). These fragments of text could be interpreted as a calling coming from magical thinking itself and redirecting the reader and interpreter of the oracle once again back into magical thinking. This reminds me of the famous hermeneutical circle proper to Hermeneutic Phenomenology. One can suppose at face value that there is a promise of gain on the exercising in magical thinking, but only for those who adhere to its peculiar way of functioning and proceed inquiring with the oracle, based on the very system of magical thinking. Apparently, magical thinking has been a modality of thought which has been self-sufficient, confined to its own magical frontiers, claiming to be something completely different from mundane experience. The second hexagram in the sequence shows the following passage in *The sequence of the hexagrams*: "After heaven and earth have come into existence, individual beings develop. It is these individual beings that fill the space between heaven and earth. Hence there follows the hexagram of difficulty at the beginning. Difficulty at the beginning is the same as filling up" (Wilhelm, 1951/1989; p. 398). According to the symbolism pertaining to the oracle heaven stands for the creative power in Nature while the earth is a symbol of matter, the stuff that makes up the universe and the bodies of men. Then, and accordingly to the Philosophy conveyed by the oracle, it is man's responsibility to make actual the two principles concerned, creative power and the matter that materializes that power, with the help of magical thinking for those who are recognizing the power, the justice and the virtue that are behind the oracle pronouncements. Man, in the condition of a microcosm reflecting correspondences with the larger macrocosm surrounding him, has been the symbolically uniting element between heaven and earth. We must bear in mind that these metaphors (and the profound symbolic language they imply) should be considered in light of the motive for the consultation of the oracle and that was this concrete question: "What is the usefulness of magical thinking for the practice of good and for the practice of evil?" This questioning presupposes a certain moral stance, not completely neutral, but then this aspect fully gives rise to the fundamentals of magical thinking in a natural scenario which is where this peculiar type of reasoning takes place. So, the question is a realistic formulation that has the power to unravel a response based on the very magical thinking process itself, the *modus operandi* for the *I Ching*. The experiment of drawing this specific oracle is unique, a single event that cannot be replicated by trying to draw other oracles repeatedly, and it is a situation that has been perfectly coherent with the theory of synchronicity (with its explanatory power for the emergence of non-causally generated patterns of meaning) as originally elaborated by Carl Jung. Is it not magic that this specific oracle resulted from the tentative ritual?

3. Discussion

The experimental results' interpretation calls for a deeper understanding of what are symbols and how they operate as objects inside the processes of human thought, a concept that thoroughly concerned Freud when researching dreams and the fantasies in primary processes, which he attributed to unconscious activities in the human mind in such a way that he had no doubt whatsoever about the roots of mental diseases plunging into the unconscious (Freud, 1911/2005). Dreams and fantasies abound with magical thoughts (and as such dreams and fantasies avoid causality inside their own specific contents) due to the special properties of the unconscious system that are absence of contradiction, timelessness, mobility of investments, and substitution of psychic reality for external reality (Freud, 1911/2005; pp. 69-72). In this piece of work the symbols are the hexagrams themselves, as I stated above, plus the metaphors contained in the associated bits of text. But most of what has been reported in the paper (the oracle experiment and the behaviours described for the Azande folk) has been operating at the level of consciousness, as manifest conspicuous contents, and surely we are not concerned here with ostensive primary processes like in a dream or in a fantasy subjected to analysis. Since magical thinking has been one positive symptom in schizophrenia and other psychiatric disorders, and since symbols have been of a paramount importance for the doctrine of Psychoanalysis, to bridge the gap between these domains in Psychopathology with the help of new discoveries by original research on magical thinking, just as the humble discoveries that have been brought to light by means of the unique experimentation herein reported promise, looks something highly desirable.

In the other hand, oracles, witchcraft and magic rituals intended for retaliation have been considered normal daily matters by the Azande people, and they are not viewed by them as paranormal procedures or as an inferiority of their mentality. Hence, a clarification distinguishing causality from non-causality in correlated events must be presented because the distinction between causation and lack of causation has been supposed to demonstrate the Hallmark that separates phenomena attributable to clear normal causes from those in which the lack of recognition of at least one cause makes the whole situation highly unlikely to be either real or suitable for an interpretation of some possible meaning contained in it. Beloff (1977) discussed causal versus acausal interpretation of psi phenomena, involving Jung's synchronicity theory in the discussion and questioning the value of the theory in psychological terms. He argued that what was going on was simply a shift of the residence of causes from a psychic level of reality (rendering a mechanistic determinism to psychological facts, whilst excluding from this rendering the quest he holds dear for unknown causes in the anomalous psi phenomena that are objects for Psychical Research) to a level pertaining to unconscious structures named archetypes (Jung, 1959/1991) that could behave as autonomous complexes in the latent part of the human mind, or even to equivalent metaphysical agents, Beloff claims cannot override the conspicuous role of "fortuitous juxtaposition" implying *per se* the inadequacy of the various *a priori* archetypal meanings pointed out by Jung (1959/1991) and that raise to conscience the numinous aspect in significant coincidences. But the discussion concerning causality, both from the point of view of the philosophical and the operational or eminently practical perspectives, has paramount and actual importance in biomedicine, in financial, political and the social sciences at large (Kleinberg, 2013; pp. 1-5) and has been endless argumentation presently far distant from the possibility of the elaboration of one unifying theory of causality, universally valid, which happens to be a situation constrained by philosophical factors (*ibidem* p. 5). The question of what does a cause consist of, in philosophical terms, remains unanswered in a full way and hence the concept of what a non-cause can be is also still very much debatable from a philosophical point of view, and this has been the question that happens to be the kernel of the discussion for the matter in this paper.

4. Conclusions

I have drawn information from a range of distinct sources largely scattered in the literature. One common denominator fairly noticeable in all this literature has been that any cause (regardless of being a finality cause, an efficient cause or a mystical cause) resides in the theory that is used to analyse and interpret the data focused by human attention. Then, the cause and its explanatory power have a context as to their expression which is the very theory employed to face the world, or the worldview of the observer. Causes are mental concepts that help us orient ourselves successfully around the world and in our lives. Magical thinking reaches for a special instance of causality based on finality and on singular events, something falling into an area where cognitive uncertainty or a degree of ignorance can bewilder the observer, who expects from the temporal closeness, the repeatability and the determinism that are naturally pre-assumed features, the usually efficient, practical, usefulness in every causal relation with a certain effect, be it physical or be it psychic. Definitely much more research is needed to understand the reasons why apparently non-causally associated events can show rather important meanings to individuals, independently of their awaken or dreaming state while the events are taking place, and eventually with great consequences for the comprehensive understanding of mental disorders like schizophrenia.

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THE DARK SIDE OF THE MIND:
CLINICAL REFLECTION ON SOME INHIBITING FACTORS OF THE REPRESSION

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Abstract

With this paper, the author intends to share and discuss some points of view about her clinical experience and reflections related with the use of repression and the acceptance of the moral/ethical authority of parental models, especially from those of the same gender. In the author's experience, clinical evidences suggest that, when the patient couldn't recognize, while a child, his father or her mother as a moral or /and ethical authority model, the repression mechanism could not be used as usually. Therefore, the patients should be obliged to manage some other way to support and live their life in a sustainable way. The individual could close up on itself, in a kind of narcissistic shell, where the language of artistic expression would seem to be the main way to transform and translate their unconscious contents.

During the psychoanalytic process, as it evolves, the patients increase their capacity in reflective thinking, decreasing their needs of acting out. At the same time, they develop the language of artistic expression and increase satisfaction with themselves, becoming more confident and less dependent on the outside eye (which served as a mirror) to know who they are.

Keywords: Repression, Parents, Artistic Expression, Ethics and Moral Authority, Creativity.

1. Introduction

My interest in this area started with the work I´ve done with children, by which I´ve come to discover and develop my ability to express myself through drawing and other creative forms. Moreover, a significant portion of my clinical experience has been developed with artists or people related to that area, who have a desire, and sometimes, the need to find a way to relieve their anxiety by creative expression such as music, dance, writing or painting. I became curious with the repetition of same patterns in "life story" and "life style" of those patients and it led me to pay special attention not just to those patterns but also to all the simple things related to them. I'll reflect about clinical evidences, when the patient couldn't recognize, while a child, his father or her mother as a moral authority model, and some apparent consequences of that failure, namely, the ability to express her/himself through creative process.

Freud, through the concept of sublimation, tried to interpret the subject enrollment on culture, in different aspects, including the artistic one. Throughout his works, the concept evolved from a negative perspective where the demands of civility imposed an excessive repression of sexual drive and several obstacles to the satisfaction of pleasure, implying the desexualization of the drive and the emergence of psychic disorders, to a positive one, after the new "pulsional" dualism of the 20's – Eros e Thanatos - allowing a new conceptualization where the sublimation doesn't oblige anymore to the desexualization of the drive. On the contrary, together with eroticism (Eros), they promote life/civility, in opposite to the movement towards death(Thanatos). Eroticization and sublimation would aim to dominate and intricate the death drive in life drive; in other words make life possible for the subject by overcoming the quiet work of death drive.

Donald Winnicott's writings on the parallels between creativity and play, and on the

role of the transitional object and transitional space also provided some understanding of the artistic process. In his works one can see the transition from the non-self of the infantile body to another object situated in an intermediary space, thus, indicating autoeroticism as the origin of the creative process. On the other hand, there are Melanie Klein´s thinkings; the "empty space" is where the maternal body, originally, exists, generating the object that would be concerned in any way of sublimation. The motivation for this creation emerges as an attempt to repair the mother's body, shaken by the child's aggressive attacks.

For Klein(Klein, M. 1929), this impulse is the basis of creative activities, rooted in guilt and the desire to restore and rebuild the lost happiness, objects and harmony of his inner world. Although Lacan found the Kleinian theory not sufficiently developed regarding the creative process, he recognizes on it, the merit of having set the topology in which the phenomena of creation is unfold.

Lacan defends that all forms of sublimation - religion, art and science- aim to fulfill this "void" and are situated within the psychic economy and follow the formula: "Elevate any object to the dignity of the Thing". The art, as psychoanalysis, is not guided by the field of ideals, but by and for the real: witch doesn't deceive. Art does not intend to falsify the real or the reality. Also for Kohut, art could be understood as a Self-Object, a process by which the individual's own Self prolongs images on objects or activities - more in functions than in people. The Self-Objects are needed for life and they exist since childhood, when, if the object is not available, it may cause, according to Kohut, a kind of trauma. It is the successful integration of our psychological experiences that allows the development of unique skills and talents to a consistent life project.

2. Evidences

In my experience, clinical evidences suggest that, when the patient couldn't recognize, while a child, his father or her mother as a moral/ethical authority model, the repression mechanism could fail. Therefore, the patients should be obliged to manage some other way to support and live their life in a sustainable way. In fact, all artists, that I've been following in psychoanalytic process share a common fact: while they were children, they didn't respect their mother or father (parent of the same gender) as a model that they could admire and follow as identity reference.

David P. Levine (1999), suggests that when the uncertain or absent parents failed to provide consistent responses that guide the child toward an effective orientation in the world, the child can attempt to solve it, for example, by forming an internal substitute capable of doing what the parent cannot.

By my own clinical experience, I would add that when this possibility is not accessible, by lack of credibility of others models available, like the other parent, the child must create that self-ideal by herself/himself, what makes she/he feel very lonely and forlorn. We can consider that this phenomenon has its origin in an experience felt as traumatic, whatever form it takes, based on feeling forlorn and lonely, not loved, feelings that cannot be thought. It´s not just the event itself and its severity that determines if something is traumatic or not, it is also the individual's inner perceived experience of that event (Elal & Slade, 2005).

We can define trauma as an excessive instinctual influx, overlapping the ability of the psyche to turn it on and elaborate it. Thus, the trauma would be situated beyond the ability of psychic representation. The traumatic event is one that does not represent, yet let that inevitably indelible mark in the memory.

Piirto (1998) pointed out that many writers experienced traumas in their family life. Goertzel and Goertzel (1962) in a study on the pervasiveness of trauma in the creative community suggested that 89% of novelists and playwrights, and 83% of poets, reported some form of trauma in their childhood, characterized by complex domestic dramas with numerous plot twists and complex emotional crosscurrents.

When working with artists in psychotherapy, it is equally possible to recognize these unresolved trauma and loss.

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The vignette of a Well-known writer will illustrate it. The life history of this man, that seemed and felt himself, at the beginning of the psychotherapy, like an adolescent although he was 34, is based on a probable traumatic relationship with an alcoholic and violent father. He remembered how ashamed he was, when his mother demanded him to get his father out of the taproom: "I remember me, a little boy of 5 or 6, walking along the walls, between the shadows designed by the high lamps, desiring not to be seen". His father beat him frequently and violently since he was a little boy. In adolescence he began to protest and to be aggressive too, especially with his father, and identified himself with heavy metal bands and their spirit. When I met him, he felt unable of writing and also he couldn't avoid being aggressive with his girlfriend, and he started to feel very disappointed with himself. Throughout his life, he used to have simultaneous sex relationships, except for the last two relationships, which he felt were more serious and stable.

In the present, he has a stable amorous relationship that began as a sexual friendship, like on that time when he had many more of those "friends". Nowadays, he turned able to write, to plan, and to organize his life in a balanced way, linking thoughts and creations inside him or through his novels, instead of acting out. He feels much more confident and able to be satisfied with his life and feels and acts like an adult that can choose his way, and he is no longer feeling as an adolescent, like in the beginning.

When that ability to be creative cannot be developed or manifest in an enough way, by any reason, we can suppose that the sufferance or the mechanisms to avoid it might appear in a pathological mode.

An example of some sort of creativity, but not enough to overcome life difficulties associated with a weak ego, is the case of <u>a failed writer</u>:

Mrs w was 29 when she began her psychotherapy. Her father talked and expressed himself in few words and feelings. Her mother was a controlling and manipulative parent. Mrs w worst memory of her childhood happened when her mother became angry with her, for no <u>significant</u> reason, and tossed to the floor all the dishes that she had in her hands. The patient felt as an aggression to herself.

She always lived life in an insecure and anxious way, scared of everything and everyone. She could not bear to have people in her house, even her husband, with whom she sometimes <u>didn't</u> stand to be in the same bed. She felt serious difficulties in interpersonal relationships. Her major complaint was that she didn't know who she was or what she wanted to do, except one thing: Restore old books, as her grandfather use to do. However, she couldn't stand being criticized by her father about it. She discovered her need to write when one night she started to write and did not stop until she completed seven novels, which forced her to work at night, and to sleep during the day, during seven months. Although she sent her projects to several publishers, no one was interested in her novels, perhaps because it hadn't enough quality.

Although she found her ability to create trough writing and restoration, her ego weakness was so enormous that would be quite impossible to find enough compensation by any creative process, whatever it was. It seems that she hadn't psychic skin.

Creative people have a special power of organizing and integrating opposites within themselves without recourse to repression.

The area of ego defense mechanisms seems to be highly applicable to the study of creativity. G. Domino and others (2002), developed an investigation that explores whether creative individuals show any differences in their use of ego defense styles.

They found significant differences between creative groups, with 4 defense styles (projection, passive–aggressive behavior, repression, and altruism) judged to be used more often by the low-creative group, and 9 (fantasy, acting out, dissociation, displacement, reaction formation, intellectualization, humor, suppression, and sublimation) judged to be used more often by the high creative sample. Given these caveats, the portrait that emerges of the high-creative, shows a much richer

psychodynamic life (more ego defenses evident), who uses not only more mature defenses but more immature and neurotic defenses as well.

An interesting study developed by Thomson et al, attempted to explore the interacting factors of dissociation, trauma experiences, fantasy proneness, and affective variability in generators (those that generate new work) and interpreters (those that interpret the work).

The results indicate that interpreters used more dissociative processing than fantasy proneness. Anger was negatively correlated with trauma experiences. The findings suggested that affect states were not strongly correlated to traumatic events, with anger being even less pronounced than other affective states.

3. Conclusions

In conclusion, we can see that repression is not a defense mechanism used by creative people. Also, it seems that, in part, the lack of use of that mechanism is related to the non-recognition of the parent of the same gender as a moral and ethical authority model and the consequent need of patients to manage some other way to support and live their life in a sustainable way.

Eissler, Bellak and others (Riviera & Cuevas, 1992) have stressed the highly narcissistic qualities and the poor object relationships one invariably observes in creative people. The creative people I have studied, namely those I shared with you, are in fact highly narcissistic individuals with a limited ability to empathize with others. We have seen, that, in general, artists, with more or less success - and even some people with borderline or obsessive perturbation, while they were children, didn't respect their mother or father (parent of the same gender) as a model that they could admire and follow as identity reference. All this can be felt as an excessive instinctual influx, overlapping the ability of psyche of turning it on and elaborate it and situate beyond the ability of psychic representation. The traumatic event is not represented, yet it leaves an inevitably and indelible mark in memory, while cannot be thinking. Probably because of that, we can think of a need to express them more than communicate to others their internal contents.

In the point of view of several authors and in my own, too much emphasis is being placed on the need to communicate. The creative individual has a primary need to express himself; in many instances, his need to communicate appears to be of secondary significance, like a secondary motive, comparable to the secondary quest in neurotic illness. However, in general, all these contents, more or less unconscious, which circulate freely, that we can imagine in a dark side of a large aquarium in moving fish, algae, water plants and other living beings and shells, are not targeted to obsessive tidiness or organization, like an aquatic wardrobe, but can be processed: in a more creatively or more pathological way.

The creative solution, contrary to the neurotic solution, seems to be a step in the direction of mental health. When the artists create new forms, they always strive to find new means that will keep them from being forced to deny, repress, distort, or compartmentalize, and that will enable them to be free to express, feel, and communicate without endangering their inner unity and integrity. I think we can conclude that creativity does not represent a true sublimation, although it may also be expressed by this mechanism. The term "sublimation" should be reserved for acts, or their outcomes, in which displacements of energy lead to socially acceptable goals, which may not be the case for artists, who create to express, to free themselves, but not necessary to communicate, although it is clear the need for narcissistic approval.

Artistic expression, alternatively, may be expressed through a kind of creative link, not associated with reflective thinking, but an immediate attempt to resolve the psychic tension, or the psychic conflict, which could be considered the level immediately below to reflective thinking, associative, a kind of unthinking bond that connects different unconscious materials in a final artistic product without becoming to

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be thought. Reflexive thinking would awake danger of contacting original trauma and its pain.

Another interesting aspect is that, those who express their dark side of the mind by artistic language seem to maintain their sexual drive active, as other drives, perhaps in a way that, not using repression, the pulses remain free, as an aquarium in which roam freely all the drives and impulses which, at times, can be organized into creative sets that will release the pressure by discharging more or less artistic productions.

In my opinion, there seems to be a creative predisposition, like a disease has a genetic predisposition. When the body or/and the mind are exposed to unfavorable conditions, this pre-disposition acts in counterpoint and in compensation of the traumatic trends that will prevent repression, in a way proportionally effective to the intensity and quality of the drive.

Freud said that people with artistic predisposition reveal "(...) a mixture, in varying proportions, of efficiency, perversion and neurosis" (Freud, 1905) and Cattapan (2006) describes the artists as beings with a psychic organization that does not restricts to any category: neither neurotic nor perverse, much less how "Mental efficiency" exclusively. "The artist is partially effective in giving account of 'dangerous disposition', he is not safe from neurosis nor from perversion "(Cattapan, 2006).

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ENLARGING AND TESTING THE CONCEPT OF UNCONSCIOUS: THE ANALYSIS OF CULTURAL PRODUCTIONS

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Abstract

Departing from triple expertise and long term research integrating social psychology, Freudian theory and cultural anthropology, we tested an hypothesis derived from the field work of Reichel-Dolmatoff, in Colombian Amazonia. RD discovered that Tukanos use a visual code of geometric signs not as aesthetic devices but as a magic form to protect their houses from mythical urubus. And to his surprise found that each sign had to them one of the meanings that would be expected in Freudian theory of libidinal projection as a basis of the unconscious creation of libidinal symbolism, relevant to the primary (associative) mode in the functioning of the mind. Observing the pervasiveness of those kind of signs in European buildings, we create a projective instrument of research, integrating 10 Amazonian and 10 Portuguese signs, and we demanded to 150 experimental subjects to associate to each of them (1) five verbal concepts selected among 14 pairs of concepts pertaining to the symbolic language found in tribes of New Guinea, (2) one of 9 of the libidinal referents of the Tukanos, against the hypothesis of refuse any meaning to the geometrical images, (3) and to associate, as Identity emblems, elements of series of cultural concepts proposed to them (terms of parenthood, gods of religious pantheons, international identities in competition, or elements of rituals, and the self). Results evidenced that European subjects associate almost without resistance geometrical images to symbolic words and to libidinal meanings, reaching levels of convergence that cannot be explained by random answers. Once proved that subjects attribute, without conscience or learning, and against hegemonic rational ideology, convergent libidinal meanings to 'abstract' images, scientific inferences must be presented: (1) departing from cultural areas, we refute the hegemonic theory of cultural relativism, a theory that reduced anthropology to local ethnography and abandoned scientific research of human functioning in the general level; (2) in psychology, we refute learning as an exclusive explanation of human creativity and differentiation; (3) we contest formal philosophical approach to 'decorative' aesthetics as an insufficient and ideological approach, refuted by these research. Complementing the clinical approach, this research constitutes, to my knowledge, the best proof of the correct foundation of Freudian scientific theory of the primary process governing the unconscious projection on cultural productions, rejected in psychology by hegemonic teaching. Controlled research supporting the analysis of cultural productions opens a new field that will contribute to an integrated theory of human action in which Freudian theory proves to be central.

Keywords: *Unconscious, Integrative research, Methodology by objectives, Projective test, Analysis of cultural productions.*

1. From distant spaces: geometric abstraction, symbolization and protective eroticization of the world in Amazonia

In the end of the 1960s, Reichel-Dolmatoff, published the results of research projects that, had they received due attention, could have revolutionized European thought, in particular in the field of Psychology and the Arts. On the one hand, he discovered in Colombian Amazonia peoples whose shamans produced and worshipped rock inscriptions, which granted him access to the cultural framework which had eluded archaeologists for years. On the other hand, he discovered that such peoples made use of a non-figurative, geometry-based visual language, with a strong erotic character, combining symbols for the genital organs and their products with symbols of various types of sexual acts and symbols of lineages. This had long

embarrassed Reichel-Dolmatoff, who publicly apologized for the uncomfortable Freudian proximity of his indigenous informants (1973: 19).

This visual language served as the basis of their artistic activities (to the almost complete exclusion of the depiction of animals, and the absence of human figures) and, were it not for anthropological research, could have been mistaken for "decoration" of the exterior walls of long houses (*malocas*), religious terrains and pottery. Devoid of meaning for a Westerner, it was "known" and translated by each and every one of the initiated males of the Vaupés river Tukanos and possessed a magical function, of "protective closure" of the group and its homes against symbolic enemies, also endowed with magical powers (ie. *urubus*), who attempted to drag them to what we know as the Milky Way, supposedly a river of detritus.

2. Scientific research: rediscovering the unconscious in the arts

Acquainted with Reichel-Dolmatoff's essay, I decided *to put the crucial question of anthropology to the test:* was this link between geometric images and eroticism, creating a visual, symbolic language, a local phenomenon, merely 'cultural', and characteristic of Amazonian Indians, convergent with the hegemonic theory of cultural relativism, or rather the result of an universal pre-verbal symbolic function which underlie language and the arts, and could take different forms in different socio-historical contexts, springing from identical psychological processes and needs?
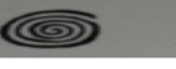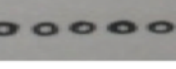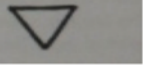
In order to test this question, I devised one of the first projective research instruments not associated to psychopathology, by crossing four dimensions, in order to examine the articulation of (1) the visual field of 'geometric' shapes (the symbolic visual language), (2) the verbal field, both connotative of symbolic languages and (3) denotative of sexual referents, and of the latter with (4) the identity field of categorical differentiation (bio-cultural, gender, inter-generational and inter-ethnic, between socio-historical groups).
To this end, I considered that the Freudian unconscious results precisely from this four-way association of libidinal body, image, word, and identity, on the basis of the drive-based investment (especially erotic) of the images which support the higher levels of language and identity processes.

For the *visual field of libidinal symbolism,* at the level of the eroticisation of the image, as gender confrontatiom, an empirical anchor was readily available, the Tukano visual language. Following two years of extended research upon the walls of Lisbon, we were able to combine ten Tukano symbols with another ten geometric symbols present in local 'artistic' architecture. In the *field of verbal symbolism*, we also had anthropological knowledge at our disposal. Buchbinder and Rapaport (1976) described – for a tribe in Papua New Guinea – a *verbal system of sexual symbolism*: "Among the Maring, as elsewhere in Papua New Guinea,(...) they point out that the concept of male includes *'high – hard – hot – dry – strong – spiritual – immortal' versus. 'low – soft – cold – wet – fecund – mundane – mortal', that are female*" (...) "*the categories of male and female have even more sweeping significance in the lives of people, not simply in terms of their behaviour, but of their perception of their universe.*" (Lidz & Lidz, 199: 46). On the basis of these data, we introduced into our research instrument a second*, verbal symbolic field,* to include 14 conceptual pairs of words with a strong symbolic charge. Drawing from both Freud and the Tukano, the third field we mobilized was the *verbal field of basic libidinal referents*, and to the project of taking research to its limits, we added to the 9 Tukano referents two 'negative' libidinal referents (faeces and menstruation), which were not used by the Tukanos but have strength in other cultural contexts, and in particular in the "West".

Figure 1. The verbal Meaning of Geometric Symbols

fertile	72	**masculine**	78	**bright**	48	**fertile**	65
feminine	55	fertile	38	cold	37	**strong**	53
bright	54	agressive	28	barren	25	agressive	32
passive	24	strong	25	clean	20	sexual	30
pacific	22	active	24	feminine	13	**united**	29
strong	11	**superior**	23	adult	12	active	24
clean	10	sexual	21	superior	9	**superior**	20
assexual	9	dark	19	agressive	7	**adult**	20
distant	7	united	17	distant	7	near	19
cold	5	joyful	14	strong	6	unhappy	12
childish	4	happy	13	unhappy	5	dark	10
unhappy	4	distant	7	isolated	5	warm	8
isolated	3	adult	6	sexual	3	sad	7
sad	1	dirty	5	joyful	1	masculine	3
sup/inferior	0	warm	2	passive	1	clean	2
	291		**320**		**199**		**334**

active	45	**active**	83	**isolated**	42	**cold**	38
dark	43	**agressive**	64	**childish**	41	**unhappy**	37
childish	36	**childish**	41	**fertile**	38	**inferior**	31
warm	28	**strong**	37	**distant**	26	strong	18
feminine	23	dark	17	**active**	20	passive	14
near	18	assexual	15	**inferior**	18	sad	14
strong	16	near	15	weak	15	clean	14
fertile	15	sterile	10	masculine	14	near	11
agressive	14	happy	8	assexual	14	fertile	10
isolated	9	superior	8	cold	11	bright	9
assexual	5	dirty	7	pacific	10	feminine	8
happy	5	united	5	happy	8	agressive	4
joyful	1	happy	2	joyful	8	childish	2
inferior	1	cold	2	bright	4	assexual	2
dirty	1	masc / femin	0	dirty	3	isolated	2

In the *identity field*, our primary research area, our aim was to observe the ways in which personal, gender, intergerational and inter-ethnic identities are translated into symbols. To this end, we devised the *concept of identity emblem* and asked our subjects, after freely filling in the first two articulations (iconic with verbal and iconic with libidinal referents), to use *visual symbols as identity emblems* (of themselves, their ideals and significant others). The *association between the 'abstract' visual field and the verbal field*, which thus acquires its symbolic dimension (the pre-condition for the structuring of the unconscious, according to Freud) was intentionally placed first, before its articulation with the libidinal referents, in order to avoid any 'realist' or 'erotic' influence.

Our research demonstrated that among Portuguese university students, lacking any child socialization or scientific training in this field and reared in a rationalist perspective, high percentages of concordance immediately manifest, resulting in verbal distributions to characterize each image, which are clearly not casually attributed.

Let us consider the example of the *verbal symbolic profile* of eight out of the 20 stimulus images, independently obtained from a sample of 30 Anthropology students, in Lisbon, not informed about the origins and objectives of the research. The *shock produced by a geometric figure with a libidinal negative investment* can either be processed merely at the personal level, or take on the collective form (statistically dominant) of an unsettling and *dysphoric semantic profile*, pointing towards discontent in the civilization in an 'civilized' area' in which erotic – and aesthetic – discontent is strongly present (in certain people more than others, in certain 'cultures' more than others, in certain artworks more than others). This fact could open the way to transform this research instrument in a clinical projective test.

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Figure 2. The Libidinal Meaning of Geometric Symbols

CULTURAL ORIGIN	FIGURE	MEANING		CULTURAL ORIGIN	FIGURE	MEANING	
		YES	NO			YES	NO
lis	11	90.1	9.9	lis	7	71.7	28.3
tuk	1	88.8	11.2	tuk	20	69.7	21.8
lis	2	88.2	11.8	tuk	16	67.1	32.9
lis	14	86.8	13.2	lis	6	67.1	32.9
lis	4	85.5	14.5	tuk	17	67.1	32.9
lis	8	84.9	15.1	lis	19	67.1	32.9
tuk	13	82.2	17.8	lis	9	59.2	40.8
tuk	18	80.9	19.1	tuk	10	54.6	45.4
tuk	5	79.6	20.4	tuk	15	54.6	45.4
lis	12	72.4	27.6	tuk	3	46.1	53.9
M (tukanos)		69.1	30.9	M (lisbon)		83.2	16.8

While philosophers and art theorists declare that geometric representations are 'abstract' and 'devoid of meaning' (the rationalist ideal of modernity), in Lisbon, not being 'primitives', only one student out of 150 found no such underlying meaning. The choices offered included "none", and yet the attribution of a libidinal meaning to each one of the 20 images ranged between over 90% and 46%, with an average close to 70% for the Tukano symbols, and over 83% for those recorded in Lisbon. Again, such results cannot be ascribed to mere randomness. The analysis of the *distribution of the 10 libidinal referents among the 20 'abstract' figures* we used makes this phenomenon even clearer. Were attributions made randomly, each referent should approximate 9% of attributions. However, in several cases, the dominant reference so closely approximates non-negotiated consensus that it exceeds 60%, while the rest is distributed among the ten alternatives. For example, figure 2 (featured in Lisbon), displays a 64.5% concentration of reference to the "Male sexual organ" (MSO); figure 8 (in the European symbolic lexicon, as 'almond' or 'mandorla') gathered 52% references to the "Female sexual organ" (FSO), while figure 1 (from the Tukano lexicon), results in the same concentration of the reference "uterus / pregnancy", and figure 14 (from Lisbon) accumulates more than 51% of references to the "sexual act".

3. Synthesis and conclusion

Within Freudian theoretical framework, the unconscious corresponds to the primal, 'childish' functioning of the mind, in the process of ontogenetic stratification of the individual's psyche, wherein each preceding layer is still active and seeks satisfaction on its own terms, while being repressed by the serial formation of later strata which provide the body, objects, and significant others with relations and meanings that are different from the previous, primal ones (narcissistic, magic. symbolic, omnipotent, fantasy oriented, etc.) and potentially in conflict with them. These relations become increasingly complex and closer to one's adult experience, that is to say, closer to the aspect of the conscience that relies on the perception of the outside world (material 'external reality') and in the introjection of the super-egoic social will (social identity oriented, cultural, mythical, ritual and ideological (external socio-cultural reality).

Recent research in neuropsychoanalysis confirm this basic revolutionary approach: "It is commonly believed that consciousness is a higher brain function. Here we consider the likelihood, based on abundant neuroevolutionary data that lower brain affective phenomenal experiences provide the "energy" for the developmental

construction of higher forms of cognitive consciousness. This view is concordant with many of the theoretical formulations of Sigmund Freud." (Solms and Panksepp, 2012). If it's true that "the 'Id' knows more than the 'Ego' Admits", there is an anthropological problem, until now scotomized, with the cognitive inhibitions of the Ego, in life as in science, that merits more research.

With this research, we had just proven, with the arts as our basis, the existence of this complex associative process, unconscious projective codifier of 'abstract' forms, with a fivefold dimension: erotic, symbolic, identity-based, artistic and magical, as a generic "expressive" mental function, independent of child 'learning', cultural education, and 'level of civilization'. *At the theoretical level, the scientific alternative to the rationalistic hypothesis of images without meaning, is to accept the hypothesis that mind as the capacity to detect transcultural unconscious messages (Freud 1913), based on the projective use of libidinal body and libidinal structuring family relations to promote a world view oriented by 'life 'instincts'* (in the Strachey's inaccurate translation). Complementing the clinical approach, this research constitutes, to my knowledge, the best proof of the correct foundation of Freudian scientific *theory of the primary process governing the unconscious production and projection of cultural productions, and of the communication from unconscious to unconscious.*

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THE RELATIONSHIP OF PSYCHOANALYSIS AND PSYCHOLOGY IN A HISTORICAL PERSPECTIVE

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Abstract

The aim of this theoretical paper is to examine historical changes in relationships between psychoanalysis and psychology. Given the embeddedness of psychoanalysis and psychology in modern culture, the relevance of insights transcends the realm of scientific discourses and can shed lights on development and functioning of broader cultural patterns. Since the emergence of psychoanalysis at the turn of the twentieth century its relation to academic psychology has been a very complicated issue. Psychoanalysis as a psychology of the unconscious challenges both the subject-matter of psychologies of consciousness and of psychologies of behavior. At the same time Freud made abundant references to Fechner as one of the founding figures of modern psychology in his conceptualizations of important psychoanalytic notions of drive, principles of mental functioning, structure of the psyche. In contrast to one-sided reception of Wundt as the father of scientific psychology in the history of psychology, which has forgotten or marginalized Wundt's Völkerpsychologie, privileging his physiological psychology, Freud referred to both Wundt's psychologies, but at the same time stressed the cognitive superiority of psychoanalysis in its attempt to interpret the hidden meaning. But meaning as a subject-matter of psychoanalysis required hermeneutic tools which were not acknowledged by psychology epistemologically oriented toward natural sciences. The gap between psychoanalysis and psychology increased during the dominance of behaviorism in psychology. With the program of cognitive revolution in 1960s the problem of meaning should have come back to psychology and possibly reopen bridges between psychology and psychoanalysis. Unfortunately, as stated by Jerome Bruner in his Acts of Meaning (1990), the original impulse of the cognitive revolution became fractioned and technicalized, shifting from meaning to information, from construction of meaning to processing of information. It is only the second cognitive revolution emerging in 1990s that brought meaning back to psychology, reconceptualizing the subject-matter of psychology as an intentional interpretive human kind and psychology as a fundamentally cultural psychology. Such a cultural psychology meets psychoanalysis as a critical cultural theory of subjectivity. As a conclusion from this historical reconstruction it could be said that a fruitful dialogue between psychoanalysis and psychology presupposes a common ground in understanding human beings as meaning-making subjects.

Keywords: Psychoanalysis, Freud, Cultural Psychology, Meaning, Bruner.

1. Introduction

Regardless of any other differences in understanding psychoanalysis and psychology, the relationship of psychoanalysis and psychology has been always seen as a challenging one.

Psychology and psychoanalysis have developed in modern times. But beyond the pure chronological reference to modernity, they are both achievements and vehicles of modernity. Meantime they are so deeply embedded into modern culture, they have become parts of even everyday vocabulary, and indispensable interpretive tools of self-understanding of individuals living in modern societies. They presuppose other structures of modernity, first of all the core paradigm of subjectivity, an individualized pattern of relationship to the world, including social world. In spite of the

fact that they share many common assumptions, psychology and psychoanalysis are also opponents in many senses.

Psychoanalysis appeared at the turn of the twentieth century in an intellectual environment which already included psychology as an independent scientific discipline. Freud's psychoanalysis was contemporary of different, even opposing psychological schools. The times when psychoanalysis grew up were times of fast scientific progress, materialized also in rapid technological development, which fostered irresistible trust in power of scientific knowledge as a means of general progress. But the formative years of Freud's psychoanalysis were also characterized by events, experiences, feelings and paradigm changes, which have shaken beliefs in unlimited linear progress and happiness as its psychological outcome.

Given the fact that psychoanalysis itself has brought about conceptual and methodological ruptures and shifts, first of all a shift from conscious to unconscious psychic processes and from rationality to instincts as main motives, the examination of relationship between psychoanalysis and psychology becomes quite a challenging task, even more so if this task is framed within a historical perspective.

2. Psychoanalysis and the early history of psychology

It is striking that both psychology and psychoanalysis, in their formation stage, refer to the same unique intellectual figure – Gustav Theodor Fechner. "The German physicist Gustav Theodor Fechner (1801–1887) provided the initial link between the experimental physiology of the 19th century and the experimental psychology of the late 19th and early 20th centuries…Assuming their identity, and Helmholtz's conservation of energy principle, Fechner reasoned that mental and physical processes must be functionally related. He also assumed they must be governed by laws of proportional variation rather than simple covariation, given the fact of resistance in any electrical system, including the nervous system." (Greenwood, 2009: 230). These achievements by Fechner were, approximately hundred years later, enough, to the famous historian of psychology, Edwin Boring to consider Fechner the founder of scientific psychology (Boring, 1950).

Freud not only considered Fechner a "deep looking researcher", but, more importantly, made abundant references to Fechner when conceptualizing psychic processes from psychoanalytic perspective: "We cannot, however, remain, indifferent to the discovery that an investigator of such penetration as G. T. Fechner held a view on the subject of pleasure and unpleasure which coincides in all essentials with the one that has been forced upon us by psychoanalytic work." (Freud, 1920g: 8)

Already in his early manuscript written in 1895 but published only in 1950, *Project on Psychology,* where he tried to include "phenomena of consciousness into structure of quantitative psychology" (Freud, 1950: 319), Freud conceived of pleasure and unpleasure in quantitative terms - as proposed by Fechner in 1870s.

Freud has relied on Fechner's "principle of constancy" in conceptualizing the fundamental psychoanalytic notions – "the two principles of mental functioning" (Freud, 1911b) and "the two classes of instincts" (Freud, 1920g): " If it is true that Fechner's principle of constancy governs life, which thus consists of a continuous descent towards death, it is the claims of Eros, of the sexual instincts, which, in the form of instinctual needs, holds up the falling level and introduce fresh tensions." (Freud, 1923b: 46).

Further, Freud highly appreciated Fechner's contributions to conceptualization of dreams, of the specificity of dreams comparing to awake states. Obviously, Freud read Fechner's *Elemente der Psychophysik* (1860/1889*)*. Needless to say that dreams were theoretically very fruitful sources to Freud. Therefore, implications of Freud's references to Fechner transcend the specific realm of dreams.

Fechner was not forgotten either in Freud's *Autobiography* („*Selbstdarstellung*"), written in 1925. There Freud admitted that he was „always open to Fechner's ideas and relied in important points on this thinker." (Freud, 1925d: 87)

Thus, Fechner with his "psychophysics" had played a foundational role for formation of psychology and psychoanalysis. Psychology and psychoanalysis as Freud understood it adopted a pure naturalistic interpretation of Fechner - which is not the whole story of him, but was functional for fostering the model of natural science as unifying model valid for all sciences.

Wilhelm Wundt, credited with the founding of psychology as autonomous empirical science, i.e. figuring as its father, is the second author from the early history of psychology to whom Freud referred – however not that extensively as to Fechner.

Contrary to one-sided reception of Wundt in the dominant historiography of psychology which has privileged his individual physiological psychology and marginalized his "second psychology" *Völkerpsychologie,* Freud referred to both Wundt's psychologies. In references in Freud's writings appear Wundts *Grundzüge der physiologischen Psychologie* und his *Völkerpsychologie.* Freud read Wundt's works that were not read by most psychologists – either in Wundt's times or later.

In preface to his *Totem und Tabu* Freud admits that the work of Wundt in the field of *Völkerpsychologie* was inspiration for his own work. He extensively presented Wundt's ideas concerning taboo and challenged Wundt's promise to come to roots of taboo representations. Freud considered Wundt's explanation of the origin of taboo in fear of demonic forces as disappointing and used instead psychoanalytic insights into symptoms of compulsory neurosis as a heuristic tool to understand taboo: "Taboo is an ancient prohibition, imposed by an external authority and oriented against the strongest desires of human beings. The desire to transgress it exists in their unconsciousness. Those who obey the taboo have an ambivalent attitude toward that which is affected by taboo." (Freud, 1912-13: 326).
Evidently, Wundt's ideas on achievements of historical development of mankind - such as taboo, totemism were fruitful for development of Freud's psychoanalytic accounts. Relying on them as a starting point Freud was able to demonstrate the advantages of psychoanalytic knowledge in understanding cultural development. Thus, it could be argued that Freud's reference to Wundt as the founding figure in the history of psychology has brought about double benefits – on the one hand, it drew attention to Wundt's legacy which was marginalized or even forgotten in psychology, and on the other hand, it demonstrated hermeneutic potentials of psychoanalysis.

3. Conflict of interpretations in psychoanalysis

While the development of psychology, at least in the first half of century, was dominantly oriented toward the model of natural science, psychoanalysis has been from the very beginning characterized by immanent tensions between naturalism and hermeneutics, or as famously formulated by Paul Ricoeur, by "conflict of interpretations": "Freud's writings present themselves from the beginning as a mixed, even divided discourse, which sometimes makes statements on conflict of forces subjected to energy flow, sometimes statements on sense patterns subjected to hermeneutics…this evident ambiguity is well founded and the mixed discourse is the basis of psychoanalysis." (Ricoeur, 1974: 79)

This ambiguity can be recognized in incongruities between psychoanalytic practice taking place as psychodynamic interaction between the analyst and the patient, and Freud's metapsychology. This tension has been famously expressed by Habermas as "self-misunderstanding of psychoanalysis as a natural science" (Habermas, 1973). Habermas argued for necessity to recognize the epistemological value of self-reflection and praised psychoanalysis for its systematic demand for self-reflection (which did not find place in topology of psychic apparatus). Not only classical hermeneutics is needed to understand meaningful structures psychoanalysis has to

deal with (linguistic expressions, gestures, symbolic works), but, as Habermas argued, a depth hermeneutics (*Tiefenhermeneutik*) which would search for the meaning of distortions, that is even not available to the consciousness of the subject.

On the other hand, exactly the departure of psychoanalysis from the model of knowledge generation and explanatory schemas developed, practiced and justified within natural sciences has been steady bones of contention. Psychoanalysis has been criticized for failure to fulfill criteria of scientific knowledge. Hans Eysenck (1985), considered to be the most cited psychologist, in his book with very suggestive title "*The Decline and Fall of the Freudian Empire*" finished his analysis by claiming that psychoanalysis assumes a pseudoscientific attitude. It is just a "failure" as it could offer only fictitious interpretations of pseudo events, illogical and inconsequent theories, intolerant and dictatorial group of adherents. Among the negative consequences Eysenck mentioned - harmful influence on patients, impossibility of psychology and psychiatry to develop as proper sciences of normal and abnormal behavior, or the backwardness of these disciplines of more than 50 years. The third negative consequence of Freud's psychoanalysis Eysenck saw in "social damage" it has caused. It is time, Eysenck assured, to look at psychoanalysis with regard to its scientific worthlessness as well as its ethical nihilism. (Eysenck, 1985)

Eysenck's critique of psychoanalysis is most comprehensive as it goes beyond the realm of scientific knowledge and addresses social and ethical implications of psychoanalysis. It is striking that a critic who defended hereditary determinism in psychology and classical scientific methodology based on beliefs in pure facts independent of theory, nevertheless found it necessary to include in his critique of psychoanalysis also moral and social critique. His objections against psychoanalysis for, as he saw it, its undermining of the values of moral life, for indulgence towards sexual promiscuity are almost a literal repetition of words which were pronounced while Freud's and books of three other psychoanalysts (Anna Freud, Wilhelm Reich, Siegfried Bernfeld) were burned in Berlin on May 10th 1933.

In spite of critique directed against psychoanalysis, in spite of behaviorism which dominated psychology in the first half of the 20th century and turned away psychology from research interest in subjective mental states, psychoanalysis continued to attract more attention in other fields and in culture in general.

4. A coming new encounter

After a long "cold winter of objectivism" in psychology (Bruner, 1990), a paradigm shift started emerging in 1960s which brought about what was generously named "cognitive revolution". It was a program of return of psychology to its traditional subject-matter – the mind. But, as so many other revolutions in human history too, cognitive revolution betrayed its original program of a restitution of human mind within psychology. Even in view of one of its founders, Jerome Bruner "that revolution has now been diverted into issues that are marginal to the impulse that brought it into being… Very early on, for example, emphasis began shifting from 'meaning' to 'information', from the *construction* of meaning to the *processing* of information. These are profoundly different matters... Information is indifferent with respect to meaning. In computational terms, information comprises an already precoded message in the system. Meaning is preassigned to messages. It is not an outcome of computation…" (Bruner, 1990: 1; 4)

Therefore, Bruner is arguing for a new, proper cognitive revolution. It is only the second cognitive revolution emerging in 1990s that brought meaning back to psychology, reconceptualizing the subject-matter of psychology as an intentional interpretive human kind and psychology as a fundamentally cultural psychology. This would be an opportunity for psychoanalysis, liberated meantime from its own naturalistic reductionism, to start a mutually fruitful dialogue with psychology on multilevel processes of meaning making. Psychoanalysis could show that meaning

making can mobilize also unconscious or repressed experiences seeking to find an expressive form by transgressing imposed restrictions. It can show both bodily and cultural effects of repression, inviting in that way cultural psychology to a shared critical discourse on human condition.

As a conclusion from this historical reconstruction it could be said that Freud built a bridge already to founders of psychology as science. However, a fruitful comprehensive dialogue between psychoanalysis and psychology presupposes a common ground in understanding human beings as meaning-making subjects. This presupposition has been fulfilled on the psychological side with the project of cultural psychology and on the psychoanalytic side with its liberation from reductionism of naturalism.

Only newly emerging cultural psychology could lay down foundations for a comprehensive dialogue with psychoanalysis as a critical theory of subjectivity.

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VIRTUAL INTIMACY

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Abstract

At the beginning of the eighties, personal computers and internet barged into people's reality. Since then until nowadays, it changed our relationship with reality through a more and more overwhelming virtuality. Fitted with GPS, digital cameras, cell phones, Bluetooth, Wi-Fi, e-mail access and social networks, people are increasingly connected to a virtual world.

Sherry Turkle, sociologist and psychoanalytically trained psychologist, is one of the most prolific researchers in the field with regard to the relationship of this virtual world with our inner worlds. Her clinical studies provide some indicators that this relationship between the virtual world and the inner world may redesign the real relationship between people, between their inner worlds.

In the past two decades, this virtual world barged into the offices of psychotherapists, were they ready or not. Nowadays, more than seeking for pressing (and possibly wrong) answers, it may have come the time to raise more questions, in order to perform both the psychoanalytical and socioanalytical work that psychoanalysis is dedicated to, since its beginning.

After Donald Winnicot asserted the importance of external objects throughout the process of developing internal objects, we are now faced with something both radically new and in constant devir due to the speed with which technology advances are achieved. In what way are these "virtual" objects contributing to the development of an inner world?

The reflection proposed in this work is based on a collection of clinical material, from various patients over several years, and intends to address how the behaviors and symptoms of patients have adapted to the virtual world. Upon the observation of the clinical material there is something that emerges immediately due to the amount of cases where it is observable: the connection to the virtual world seems to affect the intimate quality of patients' relationships with their real people. Virtual relationships – even if not totally imagined by the patients - with all their perfection and ease, seem to assign to real relationships the characteristics of impossibility, frustration and despair. The repercussions of this paradigm are usually devastating to the patient, who, by giving up on the investment in the real relationship, finds himself isolated in an inner world bursting with virtual relationships.

Keywords: Virtuality, Intimacy, Virtual objects, Inner world.

1. Introduction

It is widely known that change is seldom a welcome guest in human lives. The technological development of the last decades after the advent of the internet is, possibly, one of the most dramatic social changes that humanity has experienced in its history. Although technology is advancing on a daily basis, the constant change it is bringing to our everyday life is received in a most welcome manner by the populations in general. But, researchers in human sciences all over the world are worried about the dangers that may be hidden (or not so hidden) in this "technological brave new world".

Reading the accounts of some conferences (Kantrowitz, Judy L., 2009; Hanlon, Judith, 2001), we become aware that there is some debate about the goods and evils of the internet and the new communication technologies. This subject is, of course, very difficult to approach. The difficulty being, primarily, on the moral aspect that is always erupting when we discuss the "good" and "evil" aspects of something and, secondly, on the fact that we all use this technology and that we are the researchers and the object of our own research at the same time.

Sherry Turkle (1984,1995 and 2011), does a wondrous socioanalytical work in her three books dedicated to this subject. Her writings and her "clinical studies" were at

the beginning of my own thoughts over this matter. In her three books, written in a time span of twenty seven years, she starts at the notion of human identification with the machine and she observes the sociological and personal changes that occurred in these three decades, while societies go deeper into virtuality. In her clinical studies (2011), arise some indicators that the relationship between the virtual world, provided by the internet and the new communication technologies, and the inner world may redesign the real relationship between people, between their inner worlds.

2. "Virtual Objects"

John was twelve years old when he started his psychotherapy. His parents were worried with him, they told me he had an eating disorder and that he vomited his meals sometimes. The parents were unable to speak with him about this matter because John was unresponsive to their queries. They also told me that he was addicted to online games.

In his first session, John tells me: "When my parents are arguing, I feel really nervous. And then, I throw up. When this happens, it's awful. Mom and Dad get really busy trying to take me to the toilet and cleaning the vomit from the floor and the furniture. Then, they ask me what is happening with me, but there is nothing happening, really. After I throw up, I feel really nice and at peace."

The vomit was, of course, the way John had found to stop his parents fights, and an effective one. This symptom disappeared in a matter of weeks and John's psychotherapy evolved to other issues.

One of John's favorite topics was online gaming, he wanted me to know what happened when he played with his friends. He felt powerful on the game, he felt in control. One day he is describing one of his characters, a druid of sorts, and he says to me the following: "He has some sweet spells, he can summon from his body this green vines that grow very quickly and entangle his opponents. It does not kill them, but it pacifies them because they are unable to move. Sometimes, before I get to sleep, I imagine what it would be like to have this kind of power."

Winnicot (1954) was the author of a revolution of thought in psychoanalysis when he offers the idea that the evolution in the construction of internal objects is oriented to and by external objects.

He speaks of the "good enough" mother as an external object that will make the difference in the child's development. But what can we say about binary code druids with entanglement spells? Should we call them external or internal objects? I started to call them virtual objects.

Besides John, I followed four other patients that played online role playing games. The descriptions of their gaming is much the same, it is not the same thing as reading books like Tolkien's "Lord of the Rings", or seeing "syfy" movies. The player is the character. The game determines that they choose a character's class and race, but the adventures are felt as their own. What happens while they play is incorporated in their personal narrative.

3. Lost Words

In the sixth session I had with Rafael, he entered in my office with one of the two smart phones he always carries in his hand. He took a photo of the couch, typed something really fast in his phone and gave me a huge smile. "And, it's on facebook! I searched for you there, to add you as friend, but I could not find you. If you tell me your name on facebook I can tag you in this photo."

Rafael is, probably, the most social network active patient I've ever had. Every day he feeds three blogs, four facebook pages (besides his own) and an internet forum. He is constantly connected to the internet and he communicates daily with hundreds of people.

He started his therapy because his family, girlfriend and friends were constantly complaining that he was never available or present. He feels that their complaints are unfair but he is aware that he is more and more isolated from his relations and that the problem is probably his.

On the first four months of his psychotherapy, Rafael had an enormous difficulty in describing his emotions or thoughts. I usually saw him at 6 pm and about 10 pm I would receive a text message with a link to his personal blog. He would write about what we had talked in the session, and add photographs and music to his online and anonymous post. When I asked him about this repeated action and what it could mean, he answered: "I feel like the words are not sufficient to say what I need to say, I find it difficult to give you the whole picture without the things that we don´t have here. Sometimes, my desire is that we would do the therapy online. In this office I feel frustrated because I can´t give you the proper references. I can tell you that my girlfriend is too pretty for a guy like me, you can interpret that as me being depressed or something like that. But how can you know for sure if you never saw her?"

On the past eleven years, the number of patients talking about new technologies in the sessions has steadily increased. Sometimes, talking about what happens online seems to be the only way that some patients can speak about what is happening in their internal world.

More and more, patients pick up their smart phones during the session. They want to "show me something" that is in some way important. Words will fail where there is an image, a photo, a video or even a text written by someone who said it better. Describing someone or something to the analyst is becoming quite difficult to patients that are constantly connected to a visual, concrete and immediate way of communicating with the "world".

They want me to contact their reality, they want me to know exactly what their loved ones look like, and they want me to see them as little children walking hand in hand with their mothers. But mostly, they want me to know these things in a virtual way. They show me their memories in the form of an image in a screen and their thoughts explained neatly or poetically in blogs   The levels of frustration they feel while they are invited to actually describe me their memories, or to explain their thoughts or feelings seems to be directly connected with how virtual their lives are.

Sherry Turkle, in her book "Alone Together" (2011), speaks about this increasing frustration that people feel towards the real world when they start to compare it to the virtual world where everything is fast, enjoyable, uncomplicated and safe. Real relations are overwhelmingly complicated and real people make unreasonable demands while virtual people demand mostly nothing.

The devastation of these patients real life is palpable. While they are always connected virtually, the people they know in reality start to slowly fade away from their lives and suddenly there is no one there. I remember at least eight patients that presented this replacement of real relationships by virtual ones and the results were always the same: A profound feeling of loneliness while being in a crowded "online" party.

Rafael asked me for an answer. How could I really know? And trying to answer him, I found myself surrounded by new interrogations about reality and virtual worlds. These questions troubled me for a long time, and I had to go backwards so I could go forward. A fundamental task in psychoanalysis is the work of the negative, the search for something that is hinted as being in the unconscious mind, but is not on the conscious mind. We search through dreams, failed acts, free associations and self constructed narratives for the truth of the patient. But are we searching reality? I would say we're not.

And what kind of relationship do we have with our patients? Are we real people in their real world? Once again, I'd say we're not. The relationship we develop with our patients, is intimate and distant at the same time. When some patients describe their openness to talk about their intimacy with anonymous strangers in chat rooms, I always

remember that a lot of patients say those exact words to me. Analysts and psychotherapists have an undeniable virtuality of their own, we are there for the patient but in a virtual way.

After thinking all this through, I could understand perfectly what was the attractiveness of these virtual worlds to Rafael and to other patients with the same problem. But one last thing remained, virtual as we may be, we are professional relation providers, we work to improve the relational aspects of our patients lives. So what is happening on the internet, social networks and smart phones? Are people really connecting with each other or are they lost with too much information to handle at one given time?

Are we still adapting to a new way of relationship with the other or are we watching the first signs of an online mental disease? I wish I had more questions that could shed some light over this last question, but I don´t. Everything is happening right now, much too fast and in a wild way.

4. Transitional "Online" Objects

Maria was thirty three years old when she started her psychotherapy. She was the only child of a troubled marriage and she was severely neglected in her childhood. Her analytic process would fill a whole book, but in a simple summary version Maria was not sure about her right to exist in this world. She had no friends and her relationship with her family was troubled to say the least.

Maria always thought of herself as uninteresting to other people, especially to men, and had a huge social inhibition.

After some years, Maria tried to go online. She started to talk by e-mail with some men using an online dating service, and she started to interact with some known people through facebook.

Her relational capabilities started to arise and she was able to make some real friends after her experiments in the internet. She experienced her first kiss and had her first boyfriend when she was thirty six years old.

Using another concept of Donald Winnicot (1971), Maria used the online world as a transitional object. Her online conversations were seen by her as something real and not real at the same time, the men she interacted with were transitionally there and not there. This transitional aspect of the internet relationship gave Maria a space to breathe in, she could speak to men without the anxiety she always felt when she was face to face with them.

Over the years, I've seen some patients using the virtual world as a test tube for their capacities and projects and even as a place where they could exorcise their personal demons. The transitional quality of the internet, secures a place where adult people can develop the capacity to be genuine in relationships and learn to cope with separation.

On the other hand, this transitional space is also the home of the false self. A great number of patients have described that when they go online they put on their "Sunday clothes", they want to look their best in such a public display.

5. Adaptative psychopathology

Anthony is a sixthy two year old man that describes himself as someone that was always in love with the machine. When he was sixteen he started to use a radio transmitter to speak with people from all over the world. When he was twenty two, he started his career as a video camera operator on TV. He married and had two children, but he only did it because his family expected it and because his girlfriend insisted on marriage.

In his spare time, when he was not working with a camera or operating his radio, he produced and directed his own short films. His family was a nuisance and he hated the time he had to waste on other people.

When he was forty five, his wife had an affair with one of his work colleagues and the marriage was over. Shortly after the beginning of his psychotherapy, Anthony decides that he had enough loneliness on his life and that he needs a girlfriend. He decides to explore what internet has to offer, and in a matter of weeks he was speaking online with more than twenty women. He decides to meet with a twenty six year old woman. She is very pretty and interesting, but the date takes only half an hour and Anthony runs home to his computer. When at home, he goes online and keeps speaking with the same woman he could not stand to be more than half an hour.

"It´s like magic, you know? A magical place is created where we can get along just fine. I feel like I could tell her anything. But it has to be there, in that magical place, in the computer. What I really like is to chat, but I can live with Skype too. What is unbearable to me is to lose the screen. Behind that screen, when I'm far away, I´m a better man. When there is no screen there is only me, searching for someone to talk on the other side of the screen and with no time to waste on who is really there."

I've had more than a dozen patients that adapted preexisting pathologies to the virtual internet world. These patients are proof enough that the internet and the new communication technologies are only tools like hammers or screwdrivers, they exist as tools and are designed for this or that function. What people make with these tools is a matter of pure choice and adaptation.

6. Conclusion?

The most spectacular effects of the virtual world, taking my patients as a sample, are the disinvestment in real relationships, when compared to the virtual relationships, and the adaptation of preexisting psychopathology to the new forms of communication. The number of cases is overwhelming and increasing each year.

This virtual world is a place for disinvestment in the real persons, for "virtual" objects, for intimacy, for the unconscious, for transitional objects, for false selves, for psychopathology and for a lot more that we still need to think about. All this aspects make it a human place and therefore, a place that should receive our attention and our questioning.

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ACHIEVEMENT STRATEGIES, PERSONALITY, SELF-PERCEPTION OF ADULTHOOD, LIFE AND EDUCATION SATISFACTION: DIFFERENT "TYPES" OF ITALIAN EMERGING ADULTS

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Abstract

Introduction: Recent demographic and socio-economic changes among youths (age 18 to late 20s) in modern Western societies (e.g., prolonged school-to-work transition, delay in family formation process) has extended the developmental period that goes from adolescence till adulthood. In this current scenario young adults have more time to experiment with different life possibilities and an extended period of transition known as emerging adulthood is experienced. Research findings point out to a variation in the extent to which young adults manifest the features considered typical of emerging adulthood: feeling in-between (neither adolescents nor adults), identity exploration (in work, love, world views), focus on the self (no obligations to others), instability (in relationships, education, work), and possibilities (different options available). Indeed, some report being further along in their identity development and in acquiring the requisites they deem important for adulthood than are others. These people tend also to have higher life-satisfaction. Such individual differences might depend on how individuals react to a context and benefit from what is has to offer (e.g., family and peer support) and on one's resources (e.g., education, personality).
Method: Accordingly, the present study aimed to *a)* identify different groups of emerging adults in a sample of 282 Italian university students (M_{age}=22.3; 80.5% girls) based on differences in personality (self-criticism and dependency) and achievement strategies (success expectation, seeking support, avoidance, task-irrelevant behaviour, pessimism), and *b)* examine whether these groups were differentially related to the criteria deemed important for adulthood and to life-satisfaction.
Results: Cluster analysis identified three groups: 1) *independent positive-oriented*, (*N*=119; low self-criticism, dependency, avoidance, task-irrelevant behaviour, pessimism and high success expectation and seeking support), 2) *dependent negative-oriented*, (*N*=72; high self-criticism, dependency, avoidance, task-irrelevant behaviour, pessimism and low success expectation and seeking support), 3) *dependent positive-oriented*, (*N*=91; high self-criticism, dependency, success expectation, seeking support and low avoidance, task-irrelevant behaviour and pessimism). The groups didn't differ regarding age, gender or socio-economic status. According to multivariate analysis of variance, they differ regarding criteria deemed important for adulthood and life-satisfaction, F(16, 546)=3.41, *p*<.001. Post-hoc univariate analysis of variance reported that group 3) agreed more than the others groups on criteria related to family, F(2, 281)=4.09, *p*<.05, and relationships, F(2, 281)=5.08, *p*<.01, and group 2) reported lower satisfaction in life, F(2, 281)=4.90, *p*<.001.
Conclusions: The results confirm between individuals and within group differences in adulthood's self-perception and satisfaction. Specifically, young adults' personality and achievement strategies explain the way in which they are approaching adulthood.

Keywords: Emerging adulthood, Achievement strategies, Personality, Satisfaction, Italy.

WELL-BEING AT WORK AND SOCIAL-COMMUNICATIVE PERSONALITY FEATURES

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Abstract

This study aimed at identifying the social-communicative personality features interconnected with well-being at work. We explored the interconnection between the indicators of well-being in vocational development ("satisfaction of a professional life" and "professional self-realization") and the social-communicative personality features (the social-communicative competence and personal traits). It was constructed two main research hypotheses. The first: the high level of social-communicative personal traits and competence can contribute well-being in vocational development. The second: there are the social-communicative factors of vocational development that can be performed as personal potential of psychological resources.

The participants of sample work as civil servants at the same organization. All respondents were asked to evaluate the factors of vocational development, the indicators of burnout, the social-communicative factors.

The theoretical framework of our study was based on Ananiev complex conception; subject approach of Rubinstein; Zeer, Pavlova, Simanuk conception of social-communicative competence and Cattell structure theory of personality. In accordance with the purpose of the study we investigated the issues with following methods: special questionnaire "The factors of vocational development" by Petrash; the Maslach Burnout Inventory; the method of determination of social-communicative competence by Zeer, Pavlova, Simanuk; the sixteen Personality Factor Questionnaire by Cattell.

As a result of the analysis it was found two groups with different current situation in vocational development: the first group with favorable way of vocational development; the second group with unfavorable, unstable vocational situation. Participants from the first group are in the high level of well-being at work. They evaluate professional self-realization and satisfaction much better than respondents from the second group. Participants from the second group have higher level of burnout. They aren't satisfied with social-professional status, work results; they have the lower level of professional self-realization. Using regression analysis, we have shown that the social-communicative personality features are closely linked with vocational development. The study revealed that the social-communicative factors can favor well-being in vocational development. The personal potential of psychological resources of constructive vocational development include such features as outgoing, attention to others, easy-going, high level of social-communicative competence (social-communicative adaptability, tendency to cooperation, frustration tolerance). The social-communicative factors can contribute to highlight client's personal traits and competence which need to be developed or corrected with counseling or training.

The study results might be useful for occupational counseling, personnel selection, preventing and / or coping with problems such as burnout, absenteeism, turnover etc.

Keywords: Well-being, Vocational development, Social-communicative factors.

EXAMINATION OF THE PERSONALITY CHARACTERISTICS OF PHARMACISTS IN THE FRAMEWORK OF FIVE FACTOR MODEL AND THE CONSTRUCTION OF THEIR PROFESSIONAL PROFILES

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Abstract

The aim of the study is to determine descriptive personality profiles of pharmacists by Five Factor Personality Model in the context of a model study. Pharmacists as a professional group is chosen for this study in accordance with the report and classification of International Standard Classification of Occupations (ISCO) of International Labor Office (ILO) and the reason for selection of this occupation mostly is the easy access and easy test application. The participants of the study were a total of 181 pharmacist, 106 women (58.6 %) and 75 men (41.4 %), between the ages of 25-79 (mean=41.02±12.28). The normative group consisted of a total of 5467 people, 2628 women (48.07%) and 2839 men (51.93 %), between the ages of 25-87 years (mean=36.82±10.327). The findings revealed that women pharmacists were more loner, tolerant, moderate, agreeable, altruist, orderly, compliant with the rules, conscientious, deliberate, provident, emotionally stable, easygoing, self-confident, abstract thinking, sensitive, and open to newness than the normative group. While men pharmacists were more loner, assertive, tolerant, moderate, agreeable, altruist, orderly, compliant with the rules, conscientious, deliberate, provident, self-confident, abstract thinking and sensitive than the normative group. Pharmacists whether man or woman show characteristics such as conflict avoidance, sensitiveness, soft heartedness, agreeableness, calmness, trustfulness, and cooperativeness as a professional group.

Keywords: Pharmacist, Personality tests, Occupational groups.

1. Introduction

In the last fifty years the relation between personality and job performance has often been mentioned in industrial psychology, and how beneficial was personality measures in predicting job satisfaction and job performance criteria has been investigated (Rothmann & Coetzer, 2003; Wright, Kacmar, McMahan & Deleeuw, 1995).Recent personality studies on job performance and satisfaction have especially emphasized five factor personality model (Judge, Heller & Mount, 2002; Rothmann & Coetzer, 2003). It has been shown that big five personality dimensions are related to job performance (Barrick & Mount, 1991; Tett, Jackson & Rothstein, 1991; Wright, Kacmar, McMahan & Deleeuw, 1995). It has also been indicated that personality would be an integrative and complementary factor to exhibit the criteria related to job performance (Judge, Heller & Mount, 2002).

Some studies have shown that all of the factors of five factor model and job- related variables are correlated significantly in jobs where interpersonal relations are important. However, factors such as Conscientiousness, Emotional Stability and Agreeableness have shown more strong relations (Mount, Barrick & Stewart, 1998; Skyrme, Wilkinson, Abraham & Morrison, 2005). Furthermore, it has been stated that Conscientiousness factor is closely related to job satisfaction in realistic and conventional jobs where practicality, orderliness and compliance are essential,

Openness to Experience factor in jobs that require problem solving and creating new information, Agreeableness and Extraversion factor in social jobs are closely related to job satisfaction. As for some researchers, the best predictor of job performance is Conscientiousness and Emotional Stability factor (Abraham & Morrison, 2003; Barrick & Mount, 1991; Salgado, 1997). Some other researchers indicate that Extraversion factor along with Consciousness factor is effective in predicting job performance in some of the jobs (De Fruyt & Mervielde, 1999; Vinchur, Schippmann & Roth, 1998). Due to these results most of the researchers point out that personality dimensions need to be considered along with job-related variables. And for the measurement of personality five factor models and measurement devices based on this model have been proposed. (Rothmann & Coetzer, 2003).

Profession, point to the kind of work done while carrying out a task and defined as whole work involving of largely similar basic duties and responsibilities (ILO, 2008). To specify descriptions of positive and negative personality characteristics and typical characteristics of the target group is known as constructing personality profiles. Beyond this definition, it has been stated that constructing personality profile is also used for predicting the performance of the occupational group (Ryan, Bartels & Kreiner, 2008). In line with those mentioned above and the report and classification of the International Standard Classification of Occupations (ISCO) of International Labor Office (ILO), choosing an occupational group and carrying out a study for constructing such occupational profiles in Turkey as a model study has been thought. However for the ease of reaching out and applying the test to the target group, we chose pharmacists , and we tried to show the characteristics of pharmacists observed in practical life on theoretical basis.

Young-adult and male-female normative group differences have been reported in personality tests (Budaev, 1999). As members of occupational group and working pharmacists participated in this study, young-adult comparison has not been made and all of the procedures were carried out on adult people. The aim of this study was to compare the results of pharmacists on the scale with the adult normative data to specify similarities and differences.

2. Methods

2.1. Participants and Norm Group

106 women (58.6%) and 75 men (41.4%) pharmacist ages between 25-79 (mean=12.28 years) participated in the study. All of them are university graduates, 20.4% (n=37) of the group are single, 77.9 % (n=141) are married and 1.7% (n=2) are widowed. Adult normative group (ANG) data gathered for various studies by original researchers, to be compared with pharmacist group, is composed of a total of 5467 people, 2628 women (48.07%) and 2839 men (51.93%) between the ages of 25-87 (mean= 36.82±10.327). Student data is not included.

2.2. Instruments

Five Factor Personality Inventory (5FPI) consisting of 220 items, scored on a five-point scale was used to collect data in the study (Somer, Korkmaz & Tatar, 2002; Somer, Korkmaz & Tatar, 2004).The inventory included five basic factors and 17 sub- dimensions placed under the factors.

2.3. Results

In this study primarily, pharmacist data was evaluated in its own group, then internal constancy coefficients were calculated separately for the groups and found between 0.70 and 0.90. Then the pharmacist group data was compared with Adult General Group (ANG) by using MANOVA. As, normative group data was separate for men and women, two different procedures were carried out, women pharmacist data

was compared with women ANG and men pharmacist data was compared with men ANG separately.

While mean scores of women pharmacist are lower than mean scores of women ANG on the sub-dimensions of Interaction" ($F_{1,2732}$=23.722, $p<0.001$, η^2=0.009), "Excitement Seeking" ($F_{1,2732}$=65.830, $p<0.001$, η^2=0.024), "Emotional Lability" ($F_{1,2732}$=14.950, $p<0.001$, η^2=0.005), "Proneness to Anxiety" ($F_{1,2732}$=25.046, $p<0.001$, η^2=0.009) and "Self Assureness" ($F_{1,2732}$=28.722, $p<0.001$, η^2=0.010); are higher on the sub-dimensions of Tolerance" ($F_{1,2732}$=41.455, $p<0.001$, η^2=0.015), "Calmness" ($F_{1,2732}$=58.874, $p<0.001$, η^2=0.021), "Agreement, Reconciliation" ($F_{1,2732}$=78.471, $p<0.001$, η^2=0.028), "Soft Heartedness / Altruism" ($F_{1,2732}$=56.493, $p<0.001$, η^2=0.020), "Orderliness" ($F_{1,2732}$=29.747, $p<0.001$, η^2=0.011), "Rule Boundness / Compliance With The Rules" ($F_{1,2732}$=34.818, $p<0.001$, η^2=0.013), "Responsibility / Deliberateness" ($F_{1,2732}$=28.090, $p<0.001$, η^2=0.010), "Analytical Thinking" ($F_{1,2732}$=27.729, $p<0.001$, η^2=0.010), "Sensitivity" ($F_{1,2732}$=6.460, $p<0.01$, η^2=0.002) and "Openness to Newness" ($F_{1,2732}$=5.368, $p<0.05$, η^2=0.002) (Wilk's λ=0.92, $F_{17,2716}$=14.925, $p<0.001$, η^2=0.085).

Figure 1. Personality profiles of women pharmacist according to T scores.

	Dimension		Low 20 30 40 50 60 70 80 High		
	Liveliness	Calm		Lively	
1	Assertiveness	Shy		Assertive	
	Interaction	Like Loneliness		Does not Like Loneliness	-
	Tolerance	Intolerant		Tolerant	+
2	Calmness	Angry		Moderate	+
	Agreement, Reconciliation	Opposed		Agreeable	+
	Soft Heartedness/Altruism	Self Centered		Altruist	+
	Orderliness	Irregular		Orderly	+
3	Rule Boundness	Incompliant With The Rules		Compliant With The Rules	+
	Responsibility/Deliberateness	Slack		Conscientious-Deliberate	+
	Excitement Seeking	Provident		Excitement Seeking	-
	Emotional Lability	Emotionally Stable		Emotionally Instable	-
4	Proneness To Anxiety	Not Prone To Anxiety		Prone To Anxiety	-
	Self Assureness	Self Confident		Unconfident	-
	Analytical Thinking	Concrete Thinking		Abstract Thinking	+
5	Sensitivity	Insensitive		Sensitive	+
	Openness to Newness	Not Open to Newness		Open to Newness	+

1:Extraversion, 2:Agreeableness, 3:Conscientiousness, 4:Emotional Instability/Neuroticism, 5:Openness to Experience
+ Dimensions pharmacist group have higher score means than ANG.
- Dimensions with lower mean scores than ANG.

Mean scores of men pharmacist are lower than men ANG on the sub-dimensions of Interaction" ($F_{1,2912}$=19.955, $p<0.001$, η^2=0.007), "Excitement Seeking" ($F_{1,2912}$=35.016, $p<0.001$, η^2=0.012), and "Self Assureness" ($F_{1,2912}$=4.461, $p<0.05$, η^2=0.002); are higher on the sub-dimensions of "Assertiveness" ($F_{1,2912}$=7.300, $p<0.01$, η^2=0.003), "Tolerance" ($F_{1,2912}$=22.302, $p<0.001$, η^2=0.008), "Calmness" ($F_{1,2912}$=30.788, $p<0.001$, η^2=0.010), "Agreement, Reconciliation" ($F_{1,2912}$=40.614, $p<0.001$, η^2=0.014), "Soft Heartedness / Altruism" ($F_{1,2912}$=51.108, $p<0.001$, η^2=0.017), "Orderliness" ($F_{1,2912}$=16.661, $p<0.001$, η^2=0.006), "Rule Boundness / Compliance With The Rules" ($F_{1,2912}$=19.096, $p<0.001$, η^2=0.007), "Responsibility / Deliberateness" ($F_{1,2912}$=12.288, $p<0.001$, η^2=0.004), "Analytical Thinking" ($F_{1,2912}$=17.612, $p<0.001$, η^2=0.006) and "Sensitivity" ($F_{1,2912}$=13.997, $p<0.001$, η^2=0.005) (Wilk's λ=0.93, $F_{17,2896}$=13.389, $p<0.001$, η^2=0.073).

Figure 2. Personality profiles of men pharmacist according to T scores.

	Dimension		Low 20 30 40 50 60 70 80 High		
1	Liveliness	Calm		Lively	
	Assertiveness	Shy		Assertive	+
	Interaction	Like Loneliness		Does not Like Loneliness	-
2	Tolerance	Intolerant		Tolerant	+
	Calmness	Angry		Moderate	+
	Agreement, Reconciliation	Opposed		Agreeable	+
	Soft Heartedness/Altruism	Self Centered		Altruist	+
3	Orderliness	Irregular		Orderly	+
	Rule Boundness	Incompliant With The Rules		Compliant With The Rules	+
	Responsibility/Deliberateness	Slack		Conscientious-Deliberate	+
	Excitement Seeking	Provident		Excitement Seeking	-
4	Emotional Lability	Emotionally Stable		Emotionally Instable	
	Proneness To Anxiety	Not Prone To Anxiety		Prone To Anxiety	
	Self Assureness	Self Confident		Unconfident	-
5	Analytical Thinking	Concrete Thinking		Abstract Thinking	+
	Sensitivity	Insensitive		Sensitive	+
	Openness to Newness	Not Open to Newness		Open to Newness	

1:Extraversion, 2:Agreeableness, 3:Conscientiousness, 4:Emotional Instability/Neuroticism, 5:Openness to Experience
+ Dimensions pharmacist group have higher score means than ANG.
- Dimensions with lower mean scores than ANG.

3. Discussion

To specify typical characteristics of a group is to construct their personality profiles according to literature. If the group studied is an occupational group, to construct a personality profile, also covers predicting the performance of that group. This study has been carried out, in accordance with the above mentioned, aiming to be a model study for constructing occupational profiles of chosen occupations in Turkey. Thus, in order to show the similarities and differences between pharmacists and other people or other occupations, pharmacists have been compared with the adult normative data of the scale used in this study.

Statistically significant differences have been observed between women pharmacists and women ANG on fifteen dimensions out of seventeen dimensions measured. Mean scores of women pharmacists being lower than mean scores of women ANG show that women pharmacists are more likely to enjoy solitude, to work individually, to deal with events easily, and more self-sufficient, self-contained, prudent, controlled, stable, durable, easy going, self-confident, self-satisfied and determined than ANG. As for women pharmacists who have lower mean scores than women ANG, they are more modest, adaptable, open to criticism, calm, open- hearted, charitable, considerate, attentive, meticulous, planned, depending on authority, controlled, self-disciplined, responsible, broad- minded, cultured, considerate, understanding, aesthetically sensitive, open to differences, empiricist and liberal thinking than ANG.

Statistically significant differences have been observed between men pharmacists and men ANG on thirteen dimensions out of seventeen dimensions measured. Mean scores of men pharmacists being lower than mean scores of men ANG show that men pharmacists are more likely to enjoy solitude and to work individually, and they are more self-sufficient, self-contained, , prudent, controlled, self-confident, self-satisfied, determined and less susceptible than ANG. As for men pharmacists who have higher mean scores than men ANG, are more dominant, self-confident, active, modest, adaptable, open to criticism, calm, open-hearted, charitable, considerate, attentive, meticulous, planned, depending on authority, controlled, self-disciplined, perseverant, responsible, broad-minded, cultured, considerate, understanding, aesthetically sensitive than men ANG.

Various studies have shown that all the factors of five factor model are related to job performance, especially Conscientiousness, Emotional Stability and Agreeableness factors are found related to occupations involving interpersonal relations. In the same line it has been reported that Agreeableness and Extraversion

factors are more highly correlated with job satisfaction. As for this study, it is seen that both female and male pharmacists differed on the above mentioned factors from the normative group they are compared. When it is considered that the best predictor of job performance is Conscientiousness and Emotional Stability, it is seen that both female and male pharmacists groups differed from the normative group on these dimensions significantly.

The relative scarcity of the number of participants in this study seems to be a limitation. In addition, the study in this state seems to be a rather modest study compared with its purpose. However, the differences found between pharmacists as an occupational group and the normative group, have contributed a lot to achieve the purpose of the study. The results that will be obtained in this direction, by recurrence of this study model in various studies, in different occupational groups would contribute to the understanding of different occupational groups.

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QUALITY OF RESIDENTIAL CARE SYSTEM OF CHILDREN IN PORTUGAL: PRELIMINARY RESULTS FROM A COMPREHENSIVE ASSESSMENT

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Abstract

Approximately 8000 Portuguese children are currently in residential care. In 2012, they represented more than 90% of all the children that the protection system has separated from their biological family for their own good. Residential care for children and young people in Portugal developed and has changed, until now, without a service quality evaluation.

We will present the preliminary results of a research on care quality, allowing the assessment of current status, measuring the suitability of the services and the match of institutional offers with the real needs of the children in care.

Based on an ecological model and using an adapted version of the ARQUA evaluation system for residential care, a team of at least two researchers visited the institutions and interviewed children, caregivers, directors, teachers and liaison technicians within the entity that coordinates and oversees these institutions (welfare services).

The specific goals of this study are: the assessment of the needs and psychological adjustment of institutionalized children, the assessment of the quality of the services provided by the institutions, and gain an understanding of the relationship between these variables.

Data from this nationwide evaluation of the residential care system in Portugal may support country level policy decisions about structures, methods, mechanisms and resources, contributing to a higher degree of specialization and, ultimately, allowing the comparison of the state of the art in residential care in Portugal with the international.

Keywords: Residential care of children, Institutional care, Assessment of needs, Quality evaluation, Residential care system in Portugal.

1. Introduction

By optimistically accounts, more than eight million children around the world live in residential care (RC). That number continues to grow for a variety of reasons once more and more children are losing the protection of their families and requiring alternative forms of care (UNICEF, 2006).

RC of children and young people exists almost all over the planet with the exception of a few Muslim countries where the Islamic Sharia Law is observed (Johansson & Andersson, 2006).

The purpose of RC is to provide a safe, nurturing environment for children and young people who cannot live at their one home, neither in an alternative family environment. Features common to children's institutions are that they offer round-the-clock RC in which children live apart from their families. The size and organisation of these institutions and the content of institutional care can be very different.

There has been a long scientific debate about the negative effect of institutional life. Nevertheless, worldwide the trend of placing children in institutions appears to be growing, rather than declining. Considering that its demise is unlikely in the mid-term (Courtney & Iwaniec, 2009), RC should be viewed, in the future, as a placement option that offers high quality care tailored to residents' individual needs and as a valuable component of an integrated alternative care system.

RC for children fulfils different needs in different countries. The characteristics of RC are defined in the context of the society in question, with variations from country to country and historical development. Often there seems to be no alternative to RC.

The RC services are influenced by such factors as legislation, political ideology, staff qualifications and training, other community resources, the setting of the residential home, geographical surroundings, the children's problems and those of the families...

This complex interaction between many different factors and actors can be described in terms of the theory and model formulated by Bronfenbrenner: The ecological systems theory and the bioecological model (Bronfenbrenner, 2000). Children's development takes place in the context of his or her family and later in the context of the school and its peer group. When, in these life contexts, those children develop behavior or emotional problems and/or are victims of abuse, neglect or are at risk of being, they may need RC.The residential setting can be seen as an ecological system in itself: the staff, with their personal histories, interacts with the children and with their development histories, in a context formed by the culture and the social environment.

In Portugal, today, for almost 8000 children their home is an institution (ISS, IP, 2013). The Portuguese law still uses the term "institutional care" to describe this promotion and protection measure for children in danger (Decreto Lei de Protecção de Crianças e Jovens em Perigo, de 1 de Setembro, or LPCJP). This designation refers to a model that has been for decades put aside in most of developed nations (Gomes, 2010). It must be noted that 48% of the Portuguese RC institutions are segregated by gender. Furthermore, contrary to all established guidelines on RC, in Portugal 99% of babies (under three years old) in care, are placed in RC, despite the proven severe impact of RC on babies' development and in full contravention of their rights.

Today, RC of children is based on a family model in articulation with a specialized or therapeutic model, one which opposes to the institutional model (Bravo & Del Valle, 2009a), aiming normalization, respect for each individual differences, personalized care, caregivers with professional expertise and capable of establishing close relationships, with open facilities, integration in the community, a small number of children (less than 12) per house and a good caregiver versus children's ratio (Del Valle, Bravo, Hernández & González, 2012). Staff who reveals sensibility and is capable of efficiently responding to the young people's problems and needs without being afraid of establishing attached and significant relationships is considered as best serving children's interests (Bravo & Del Valle, 2009b). Accordingly, caregivers must be approachable, respectful, culturally aware, fair, reliable, persistent, engaged, concerned, prepared to listen and responsive.

The RC must answer to each child's necessities and not in reverse (Calheiros, Lopes & Patrício, 2011) and be provided on time (Aldgate & Stathan, 2001). Despite all efforts made by Portuguese welfare services, which include publishing Quality Manuals (ISS.IP, 2007a; ISS.IP, 2007b) there is very little knowledge about: how these institutions work; what are the needs of children and young people in care; what services are provided to them; if those services really suit the identified needs; and what are the therapeutic strategies implemented in this context (Rodrigues, Del Valle & Barbosa-Ducharne, 2013). The limited research in the area of RC of children - which is an international phenomenon (Bravo & Del Valle, 2009b) - proves to be even more dramatic in Portugal. Therefore, caregivers' practices are not empirically sustained, nor are the board directors of the institutions or policymakers' decisions that affect the lives of these children, based in research results.

Without a broad evaluation it´s impossible to know the quality of the services that are provided by the institutions to which the Portuguese State transfers the responsibility of replacing families when parents cannot, or are not able, to assume their role. We will present the preliminary results of a research on services' quality of RC in Portugal which allows the assessment of the current status, measuring the

suitability of the services and the match of institutional offers with the real needs of the children in care.

2. Objectives

The general objective of this research is the quality assessment of the Portuguese RC system. The specific objectives are: Survey the current reality of RC in mainland Portugal; evaluate the supply of resources and services provided by RC institutions; Identify the characteristics and needs of children and young people in RC, including their psychological adjustment, strengths and difficulties, self esteem, personal wellness, subjective happiness and satisfaction with life; to evaluate the quality of RC institutions assessing the adequacy of service offerings to the identified needs; compare the quality of RC system in Portugal with the international reality and produce a scientific basis for policy-making and management in this area.

The pilot study objectives were to test the evaluation instruments and complement the research team procedures training.

3. Methods

In late 2011 there were 345 institutions of RC in mainland Portugal. A descriptive analysis of the reality of RC allowed to realize that these institutions were distributed in 207 homes for children and youth (LIJ), 127 temporary centres (CAT), 8 apartments of autonomy (AA) and 3 specialized shelters (CAE). We will evaluate 80 of these institutions, which represents a national, representative and random sampling, based on the type of institution, obtained by a computer program developed for the purpose.

A team of at least two researchers will visit, for a day or 2 each institution (depending on the institution's size). Participation in research is strictly voluntary for all participants (including de institution). The visit is previously prepared: information about the study is provided; clear-cut identification codes for all participants (whose key is only handed by the research team on the visit day and destroyed afterwards); and an informed consent is signed. The visit includes: a guided tour for all the building; documental analysis; interviews - with a minimum percentage of participants defined according to the number of children in that institution - (director, children between 6 years old and 12, adolescents or young people over 12 years, caregivers; and the liaison agent in welfare services); application inquiry to young people, over 12 years old, in group context; caregivers' individual filling out inquiries; and solicitation to fill out inquiry for the children's teachers (these will be posteriorly sent by mail).

In the pilot study we visited 6 institutions: 4 little size (under 16 children; 1 medium size (between 16 and 30 children); and 1 large (more than 30 children). The total number of children/young people living in these 6 institutions is 114, aged between 2 months and 20 years old. 61 children or young people in care, 6 directors, 55 caregivers, and 6 liaison agents in welfare services were interviewed.

3.1. Instruments

We use a translated and adapted extended version of ARQUA's methodology of research (Del Valle & Zurita, 2000) a Spanish system developed by GIFI from Oviedo University, with decades of proven experience in RC quality assessment. A complementary selection of evaluation instruments was done and was made a complementary incorporation of parameters relating to quality criteria detailed in Portuguese Quality Manuals (ISS.IP, 2007a; ISS.IP, 2007b) and we chose to adapt all the interviews items to the latest version of quality standards for RC (Del Valle, Bravo, Hernández & González, 2012), guaranteeing a complete adaptation of the instrument to the latest international quality requirements in this sector. This process led to a new and major overhaul of almost all interviews. This reformulation enables a direct and

unambiguous correspondence between each item and sub-standard and among each group of items and the corresponding standard of quality, with a properly coded correspondence. These changes from original ARQUA were conducted under the supervision of the original authors and with their approval. The new set of instruments was renamed ARQUA - P: Portuguese Comprehensive Evaluation System for RC (Rodrigues, Iglésias, Barbosa-Ducharne & Del Valle, 2013) that includes: 1 document for previous information survey, an observation grid, 2 interviews for children and young, 2 interviews for direct caregivers, 1 interview for the director of the institution and 1 interview for the articulation agent in Welfare Services.

To assess psychological adjustment and the needs of children and young people in RC we use the Portuguese versions of ASEBA: Achenbach's System of Empirically Based Assessment; RSES: Rosenberg Self-Esteem Scale; SWLS: The Satisfaction with Life Scale; PWB: Personal Wellbeing Index; SDQ: Strengths and Difficulties Questionnaire; SHS: Subjective Happiness Scale; e SPPA: Self-perception Profile for Adolescents.

4. Discussion

We will present results of the pilot study and a descriptive analysis of the Portuguese RC system according factors and standards internationally referenced to have influence in the quality of RC, comparing the data with universal criteria. Results already available show that self-esteem of adolescents and young people over 12 years old correlates positively with all the ARQUA-P dimensions. The volume of data available will permit in time a large variety of analyses.

5. Conclusions

From the analysis of the historical evolution and current context of RC in Portugal it becomes clear that some ignorance remains in regard of how these institutions work: the quality of services they provide, their adequacy to the real needs of children living there and young people in care, the type of therapeutic and educational interventions, and how the care routine and activities are organized to promote their physical, psychological and social development.

The construct "quality" in this field was established as a dynamic concept that follows the adequacy of resources and services provided by RC to the needs and characteristics of children and young people in care. Thus, the quality of RC is associated with psychological adjustment, wellbeing and satisfaction with life experienced by children and young in care. The ideas of quality and assessment are inextricably linked but accommodating subjective, plural and contextual aspects to this concept requires the involvement of all people in context (including the children), collecting information from different sources and types, benefiting from a multiplicity of perspectives and understandings. This will make possible: to realize the adequacy or inadequacy of services to children's needs; propose the development of specific services; stimulate the implementation of therapeutic empirically based programs; influence decisions and policies related to RC; and compare the Portuguese RC with how this protective measure is provided elsewhere.

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P-E FIT OF NEEDS, VALUES, AND SELF IDENTITY AS CONTRIBUTORS TO ORGANIZATIONAL COMMITMENT

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Abstract

Many studies show that when organizations satisfy their members' needs the result is likely to be a heightened level of members' organizational commitment (OC). However, if one views the event of need satisfaction as one example of P-E Fit (Person Environment Fit); that it is in fact bringing about better fit between person's needs and the opportunities to satisfy them as offered by person's organization, then one is lead to seek other dimensions where P-E Fit would bring similar results. Two important dimensions come immediately to mind: (1) P-E Fit of the person's general values with the opportunity offered by one' organization to realize those value; (2) P-E Fit between the person's self-identity and the opportunity offered by his/her organization to allow expression of this self-identity.

I report in this paper from several studies to show how the three dimensions of P-E Fit (need satisfaction; value realization; self-identity expression) contribute independently and cumulatively to variance explanations in OC. The studies I report about show that the levels of contribution of each of the dimensions of P-E Fit to OC is also differentiated according to the type of organization we deal with (whether it is mostly a business organization; mostly a value oriented organization; or mostly a community/family focused organization); and that it also depends on the characteristics of members and their personal focus (instrumentally oriented, or value oriented, or community oriented). Yet, even in business organizations the level of P-E Fit of values and self-identity determine level of OC to a large extent.

The studies I report about were conducted on a wide range of organizations in Israel – regular business organizations, voluntary organizations, kibbutz communities, security organization, and extended families.

I draw conclusions as regards the focus management should put on P-E Fit of other dimensions besides the satisfaction of personal needs.

Keywords: *P-E Fit, Organizational commitment, Value realization, Self-identity expression, Need satisfaction.*

Preface

In this paper I deal with two important groups of variables in organizational life: organizational commitment (OC), and P-E Fit as a central determinant of OC. Since this particular paper is very limited in its allowed length, I present here only a skeleton of the relevant theory. More elaboration and demonstration will be given in my oral presentation itself.

1. Organizational Commitment (OC)

While the concept of OC is used by many as a central outcome variable of organizational behavior, there exists little agreement about its definition. Yet, a clear, unambiguous definition of this concept is very important because only when it is clearly defined, it could lead us in the path of fruitful research of itself, its antecedents, and its outcomes.

The problem with many definitions of OC is twofold: (a) some common definitions are so robust, undifferentiated, and not concrete that it is almost impossible to translate them into researchable questions. An illustrative example is Hulin's (1992) definition of OC as a general orientation of an individual towards his or her organization (positive or negative). (b) Other definitions combine their assumed cause with their expression. An example is the very popular definition of OC by Meyer & Allen (e.g. 1997) of three components: *affective commitment* (an emotional connection or identification with organization); *continuance commitment* (the tendency to stay in organization because of the perceived costs connected with leaving it); and *normative commitment* (the tendency to stay in membership (due to feeling of loyalty that is based on individual's intrinsic values.) The problem with this definition is that it combines within the definition of components of OC their assumed causes (e.g. "perceived costs", "feeling of loyalty", "intrinsic value"). By doing so the definition precludes the possibility of investigating other potential causes that contribute to the same component of OC.

I prefer to adopt the definition offered by Mowday, Porter, & Steers (e.g. 1982) in which they look at the suggested components of OC as standing alone in their own right and therefore allow to investigate any kind of determinant that might explain their variance among organization members: Willingness to stay in membership (hence on I will refer to this component as "presence"); willingness to contribute beyond the formal demands of office ("contribution"); level of identification with organization ("identification).

The next question to answer is: what are the central determinants of OC?

2. Person – Environment Fit (P-E Fit)

While there exist many theories to suggest determinants of OC, here I focus on one set of OC sources that is among the most central to explain level of OC.

Imagine that you ask a common manager to respond spontaneously to the following question: "what should you do in order to strengthen the commitment of your subordinates to their work and organization." An unsophisticated manager would probably suggest elevating money rewards. A bit more sophisticated manager might add psychological rewards such as enriching subordinates' jobs or giving subordinates more influence. The common denominator to these suggestions is that he or she thinks about various rewards – need satisfiers – that might entice subordinates to higher levels of OC. We, however, should look at them from a general theoretical perspective – they all deal with some expression of a *fit* between *person* (subordinates' needs) and *environment* (opportunities offered by organization to satisfy subordinates' needs.)

Indeed, quite an extensive literature shows how P-E Fit of needs and abilities increases levels of motivation and OC (Kristof-Brown, Zimmerman, & Johnson, 2005).

However, if one looks at this evidence from a wider theoretical perspective (i.e. to indicate P-E Fit) and not just satisfaction of needs, then one is directed to ask what other P-E Fits should bring about similar results?

Here are two other facets of P that their Fit with environment should bring about similar outcomes in OC: (1) individuals' commitment to *values* and those values' realization by their environments (organizations). (2) Individuals' *self-identities* and the potential expression of these identities by their held roles in organization. Although some theoretical writings have been directed to the topics of realization of values and the expression of one's self identity as contributors to OC (Shamir, 1990; Leviatan, 2003), research about the fit of values and their realization is very slim and mostly about the realization of work values (e.g. Hofstede, 1998; O'Reilly III, Chatman, & Caldwell, 1991) and not general values. An exception is some research that focuses on workers' unions (e. g. Sverke & Kuruvilla, 1995). Research with the concept of self – identity and the effect of it on level of OC is practically non-existent. This is despite the strong arguments given in the literature for the importance of the expression of self-

identity in motivating individuals for behaviors and expression of attitudes (e.g. Katz & Kahn, 1978; Kelman, 2006).

Yet, if P-E Fit on these other two dimensions of the human constitution (belief in values and the need for the expression of self-identity) are indeed potential contributors to OC of organization members, then organizations should act to bring about Fit in them for the benefit of both individuals and organization.

3. Suggested relationship among P-E Fit dimensions and OC components

I suggest several more exact hypotheses about the potential relationships among the three components of OC (presence, contribution, identification) and the three dimensions of P-E Fit (of meeds/abilities; of values; of self-identities) and also explain why these relationships are conditioned on the archetype of organization/community in which they are expressed (e.g. business or work organization; ideological, political or voluntary organization; closely knit/intimate community organization).

(1) P-E Fit of needs and abilities contribute mostly to the OC component of "presence". Fit of needs of which satisfaction is intrinsic, could also contribute to the OC component of "contribution".

(2) P-E Fit of personal values with organization goals and norms of conduct should contribute mostly to OC components of "contribution" and "Identification" but less so to "presence".

(3) P-E Fit of self-identity with its potential expressions in individual role/office in organization should contribute to all three components of OC.

Another refinement of the relationship of P-E Fit dimensions and OC components is due to the type of organization which is the site of such relationship.

(4) In organizations that are mostly of the business/work type the strongest relationship would show between the dimension of needs/abilities and the component of "*presence*";

(5) For organizations that are mostly of the voluntary archetype, I expect the strongest relationship to be of the value P-E Fit dimension with the "*contribution*" component of OC and also with the *identification* component of OC;

(6) For social organizations that are mostly of the intimate community archetype the strongest relationship will be of the self-identity P-E Fit dimension with the component of *identification*.

(Another refinement of the of the general model (which, due to shortage of time will not be discussed here) is that the relationships of the P-E Fit dimensions with the OC components will be further conditioned on the relative importance individuals assign to the satisfaction of their different needs/abilities; the realization of their different values; and to the expressions of their different facets of self-identity).

4. Research sites and methodology

Hypotheses based on the model in Graph 1, were tested in a series of studies. (1) Two studies conducted among members of Israeli *kibbutzim* (communal communities which combine the three prototypes of organizations – business/work, ideological, intimate community. Leviatan, Oliver & Quarter, 1998). The studies were based on surveys of several hundred members (2400 and 1900) and several dozen communities (25 nad 14) during two periods (1992-1995; 1997-2002) (Leviatan, 2013). (2) Several hundred individuals who at the same time held work roles, were volunteers at some organization, and were members of intimate communities (e.g. extended family or clubs of leisure activity). (3) About two hundred and twenty employees of a governmental security organization in Israel where members are recruited from volunteer candidates (and therefore, a strong aspect of ideology is expected) (Buksenbaum, 2009). (4) A comparison between two samples of kibbutz members,

one group composed of members (about 350) in traditional kibbutzim (similar to those in study 1)and another group composed of members (about 520) from transformed kibbutzim in which remuneration is based on job or office (rather than needs) therefore higher levels of inequality and lesser adherence to kibbutz basic values. (Rachmani, 2007). (5) A comparison of hired employees (50) and volunteers (50) holding similar jobs/roles in an organization that deals with socially unintegrated adolescents (Mizrachi, 2013). (6) A comparison of three types of residents of kibbutzim -- members in traditional kibbutz, members in transformed kibbutz (similar to study 4), and residents (nonmembers) who rent housed on kibbutz premises (not published).

The research methods employed in all these studies (where applicable) were similar. In principle, levels of P-E fit dimensions were measured and so were levels of OC components. Than each of the OC components (where possible) was regressed (multiple regression analyses) on the dimensions of P-E Fit and some control (demographic) variables. Where applicable, these relationships were analyzed as conditioned on the prototype of organization/community in which the data were collected. Estimates of OC variance explained by the P-E Fit dimensions in each analysis were given by the following rational: In standard scores, the squared multiple correlation is given by $R^2 = beta_1 * r_1 + beta_2 * r_2 + \ldots + beta_n * r_n$. Therefore, $beta_n * r_n * 100$ gives a good estimate (in %) of the <u>variance</u> explained by predictor n. $Beta_n * r_n / R^2 * 100$ gives an estimate in % of the contribution of predictor n to the <u>explained variance</u> in the dependent variables. This would not apply for *rs* that are very small.

5. Research findings, discussion, and summary

Due to the limitation of length imposed on this summary, I will not present actual findings in tables and graphs (these will be presented in my oral presentation). Here I only summarize the major findings.

a. All the hypotheses formulated in section III were supported in most studies:

(1) Indices that represent levels of P-E Fit dimensions were generally in positive relationship with indices that represent components of OC.

(2) the three dimensions of P-E Fit contributed, each, in a distinct way to explain the variance in OC components and their contributions were cumulative.

(3) The hypothesized differential relationships of certain P-E Fit measures with certain OC components were generally supported according to the theoretical model.

(4) In those studies where it was possible to test the conditioning effect of the prototype of organization – results support the theoretical hypotheses.

(5) The empirical distinction between the contribution to OC of *Value realization* vs. *Self-Identity expression* did not come out very clear and it still needs further investigation.

(6) Over all the amount of variance explained in OC by the three P-E Fit dimensions is rather high and ranges between 20-60 percent of the variance in the OC variables – depending on the particular study and the particular analysis. These levels of relationship easily compete with other known models of causes of OC.

b. P-E Fits seem to be very useful construct to predict individuals attitudes and behavior in organization settings as already demonstrated in the classical study by French (1974).

c. Since in most instances the P-E Fit of *values* and *self-identity* added more to the explanation of variance in OC than *the satisfaction of needs* by itself, it is clear that organizations should take into account those "Fits" as potential contributors to OC and find ways in include them into their regular ways of conduct.

d.One could suspect that, perhaps, the three components of OC (*presence, contribution*, and *identification*) are just one theoretical construct with three different names. The same question might be raised about the three dimensions of P-E Fit (*needs, values,* and *self- identities*). To answer these queries we conducted in several studies factor analyses of all the items of OC and separate factor analyses for all the P-

E Fit items. The factor solutions of those analyses clearly proved the independence of the three components of OC and similarly prove the independence of the three dimensions of P-E Fit.

e. It is fair to conclude this presentation by stating that the common layman assumption (and that of our imaginative manager from the beginning of my presentation) that satisfying needs is clear and sure way to enhance members OC in organizations while true in itself, is just one small part of truism. Finding other P-E Fits would much increase the strength of members OC in organization.

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THE REPRESENTATION OF BELARUSIAN STATE IN COMMON CONSCIOUSNESS OF STUDENTS DURING THE FINANCIAL CRISIS

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Abstract

Image of the state as a socio-political institution largely exposed to situational factors. It depends on the economic and political situation in the country, and on how accurate and timely actions of the authorities. The main objective of this study was to investigate the image of Belarusian State in common consciousness of students before and during the financial crisis. The research was carried out in two stages: before the global crisis (September-November 2008) and against the backdrop of the acute phase of its occurrence in Belarus (October-November 2011). We used a method of modified semantic differential (MSD) with stimulus "State in Modern Belarus" and association test. We also measured the values, by M. Rokeach. 360 students from Belarusian universities took part in the research. Groups at the first and the second stage were the most balanced (180 people: 90 men and 90 women, aged 19 to 24 years). The results of research using MSD showed that during the acute phase of the crisis there have been significant shifts in the reflection of the state in the minds of students. Only 2 of the 20 descriptors ("trenchant" and "controlling") not give statistically significant differences between the State's images in 2008 and 2011. Only descriptors "native" and "friendly" remained in the positive zone of the semantic space in 2011. The financial crisis in Belarus led to a sharp decline in authority of the government. Analysis of descriptors showed that the Belarusian government was recognized as totalitarian (M = $-1,19$; $\sigma=1,67$), not credible (M = $-1,14$; σ = 1,71), coercive (M = $-1,18$; σ = 1,64) and forbidding (M = $-1,22$; σ = 1,51). Estimates for the descriptors "moral", "humane" and especially "fair" significantly decreased. The data of ranking associations with the term "The State in Modern Belarus" in 2011 was also deformed in comparison with the data in 2008. It clearly demonstrated the political resentment of citizens due to the effects of the financial crisis. Second place in the ranking of associations (after "president") got "tyrant", then "control", "domination", "management". Products of political activity - order or tranquility (p <0,05), stability (p <0,01) and legitimacy (p <0,001) - significantly shifted to the periphery. Thus, errors and failures in economic policy had a negative impact on the image of the state and its characteristics as a socio-political institution. Students for whom the value of money was higher assessed below the power of authority.

Keywords: Image of the State, Financial crisis, Modified semantic differential, Political resentment of citizens, Political offense.

1. Introduction

The image of the state is seen as an important psychological phenomenon in mass and individual political consciousness. K. Boulding (1959) had used the concept of the "image" to explain the causes of hostility. There are different concepts of the image of the state. Fisher defines "image" as "an organized representation of the social object in the cognitive system of the individual" (Fisher R.J., 1990). As noted by the leading Russian expert in the field of psychological semantics, the academician V. Petrenko, for the political and economical institutes to be able to function "certain figures of consciousness, which implement the economic and political behavior, are required" (Petrenko V., Mitina O., 1997, 2008).

2. Research objectives and design

The image of the state as a socio-political institution is greatly exposed to situational factors. It depends on the economic and political situation in the country and on how accurate and timely the actions of the authorities are. The main objective of this study was to investigate the image of the Belarusian State in the common consciousness of students before and during the financial crisis. The research was carried out in two stages: before the global crisis (September-November 2008) and against the background of the acute phase of its occurrence in Belarus (October-November 2011).

3. Method

3.1. Participants

360 students from Belarusian universities took part in the research. Groups at the first and the second stage were the most balanced (180 people: 90 men and 90 women aged 19 to 24).

3.2. Instruments

As the main method of studying the image of the state in modern Belarus we used a self-developed symbol-association ranking method with the stimuli concept of "State". The test materials contain two identical lists of association symbols. One of them demands associations with the state as a real (today`s) institute, and the other as an ideal one (the way it should be). The list of associative concepts includes: *state functions* (governance, rule, direction and control) the state of society, embodying the *products of labor policy* (rule of law, stability, freedom, order, social security), the specific *people and groups* that are associated with the State (President, ruling class, parties, the bureaucracy), some *form of interaction* between elements of the system "citizen-state" (a partner, a tyrant, a competitor, or nobody).

We used a modified semantic differential (MSD) method, which includes 20 descriptors. Both methodological tools developed by one of the authors of this paper (O.Deineka) were tested for constructive validity and reliability and have proved effectiveness for monitoring of the image of the Russian state, and for a cross-national comparative studies in Germany, France, USA, Mozambique.

We also studied the structure of value orientations among students of Belarusian universities, by the M. The Rokeach Value Survey (V.A,Yadov modification).

The subjects were also asked to indicate their age, sex and a subjective level of their household income.

Statistical analysis of Data. We used nonparametric statistical methods. The significance of differences was revealed using the Van der Waerden criteria. The correlation analysis was produced using Spearman method.

4. Results

Let us refer to the results of the symbol-association ranking method, represented in Table 1.

Table 1. Primary statistics of data of the symbol-association ranking method with stimulus "The State in Modern Belarus".

"The State in Modern Belarus" (ranking associations)	The comparative periods						the Van der Waerden criteria
	before the global crisis (September-November 2008)			during the financial crisis in Belarus (October-November 2011)			
	Rank	M	σ	Rank	M	σ	
Political Parties	13	10.87	4.45	12	11.42	4.58	
Social Protection	12	10.86	4.22	13	11.44	4.46	
Domination	6	7.62	4,85	**4**	6.86	4.59	
Partner	15	12.54	3.33	16	12.37	3.30	
Nobody	18	13.83	5.01	10	10.87	5.67	3.70***
The ruling class	8	10.87	4.75	8	8.27	4.71	2.16**
Order	9	9.95	4.57	11	11.37	7.54	2.04**
President	**1**	2.97	3.64	**1**	3.87	4.08	2.53**
Leadership	**4**	7.03	3.95	7	7.81	4.13	
Tyrant	11	10.29	6.30	**2**	6.44	5.79	6.25***
Stability	14	11.11	4.91	17	12.73	7.06	2.86***
Control	**2**	5.99	3.62	**3**	6.52	4.03	
Bureaucracy	10	9.66	4,99	6	7,69	4.83	2.05**
Management	**3**	6,14	3.59	**5**	7.12	3.28	3.41***
Freedom	17	13.08	4.52	18	13.91	4.49	
Competitor	16	12.60	3.41	15	12.17	7.06	
Legitimacy	7	9.18	4.18	14	11.55	4.62	3.65***
Regulation	**5**	7.54	3.86	9	8.86	3.76	3.17***

Note: significantly different * – $p<0,05$; ** – $p<0,01$; *** – $p<0,001$;   the smaller the rank place of the associative concepts, the more it is important.

As you can see, the data of ranking associations with the term "The State in Modern Belarus" in 2011 was also deformed in comparison with the data in 2008. It clearly demonstrated the political resentment of citizens due to the effects of the financial crisis. "Tyrant" got the second place in the ranking of associations (after "president"), then go "control", "domination" and "management". Products of political activity - order ($p <0,05$), stability ($p <0,01$) and legitimacy ($p <0,001$) - significantly shifted to the periphery. (A perfect image of the state went even further from the real one in 2011 than in 2008). Thus, errors and failures in economic policy had a negative impact on the image of the state (and its characteristics) as a socio-political institution.

In addition, let us consider the results obtained by the MSD (Table 2).

Table 2. Primary statistics of the MSD data in a comparable group.

The MSD descriptors (and the level of significance of differences)	The State in Modern Belarus, estimated by students in 2008		The State in Modern Belarus, estimated by students in 2011	
	M	σ	M	σ
Moral / immoral***	0.91	1. 33	-0.20	1.88
Decisive / indecisive	0.21	0.06	-0.06	0.71
Legal / illegal***	0.67	1.63	-0.25	1,91
Responsible / irresponsible***	0.86	1.46	-0.10	1.81
Stimulatory / coercive**	-0.64	1.73	-1.18	1.64
Safe / dangerous***	1.32	1.49	0.17	1.79
Credible / not credible***	0.40	1.54	-1.14	1.71
Constructive / destructive***	0.85	1.33	-0.22	1.62
Democratic / totalitarian***	-0.28	1.80	-1.19	1.67
Native / alien***	1.99	1.40	0.94	2.00
Progressive / backward***	0.22	1.68	-0.67	1.63
Controlling / not controlling***	1.70	1.54	1.54	1.69
Calm / disturbing***	1.74	1.46	0.14	1.87
Friendly / hostile***	1.76	1.28	0.47	1.85
Independent / dependent***	0.20	1.78	-0.66	1.89
Enabling / not enabling***	-0.57	1,53	-1,22	1,57
Fair / unfair***	-0,06	1,41	-0,81	1,62
Prospective / hopeless***	0,47	1,76	-0,55	1,73
Profitable / unprofitable***	-0,20	1,51	-1,27	1,52
Humane / inhumane***	1,01	1,68	-0,14	1,77

Note: significantly different ** – $p<0,01$; *** – $p<0,001$.

The results of the research using MSD showed that during the acute phase of the crisis there were significant shifts in the reflection of the state in the minds of students. Only 2 of the 20 descriptors ("decisive" and "controlling") didn't show statistically significant difference between the State's representations in 2008 and in 2011. Only the descriptors "native" and "friendly" remained in the positive zone of the semantic space according to data of 2011. The financial crisis in Belarus led to a sharp decline of the authority of the government. Analysis of descriptors showed that the Belarusian government was recognized as totalitarian (M = −1,19; σ=1,67), not credible (M = −1,14; σ = 1,71), coercive (M = −1,18; σ = 1,64) and forbidding (M = −1,22; σ = 1,51). Estimates for the descriptors "moral", "humane" and especially "fair" significantly decreased.

Situational factor reflected in the system of values of young people. Some negative manifestations of value's orientations can be seen in Table 3. So, the role of money and entertainment has increased (block of the terminal values). The role of values of tolerance and sense of humor has declined and intolerance of shortcomings of people increased (block of the instrumental values).

Table 3. Primary statistics of data of the M. Rokeach test (only statistically significant differences are shown).

Value orientations (ranking test)	The comparative periods						the Van der Waerden criteria
	before the global crisis (September-November 2008)			during the financial crisis in Belarus (October-November 2011)			
	Rank	**M**	**σ**	**Rank**	**M**	**σ**	
Terminal Values							
Comfortable Life (Money)	6	7.98	4.59	4	6.60	4,27	2.939**
Pleasure (Entertainment)	16	14.03	3,87	15	12.78	4.14	2.641**
Mature love	2	4.62	4.85	2	6.86	4.59	2.890**
Instrumental Values							
Non-Forgiveness (Intolerance of shortcomings)	18	16.00	3.26	18	15.00	3.96	2.158*
Broad-Mindedness (Tolerance)	7	8.57	4.55	13	10.22	4.86	3.233***
Cheerfulness (Sense of humor)	3	6.30	4.87	4	7.49	4.84	1.966*

If we turn to personal value orientations as a factor of the representation of Belarusian State in common consciousness, the orientation on the "happiness of others" has most clearly manifested itself. It showed the greatest number of significant correlations with the estimates of the MSD descriptors. Students with more pronounced collectivist orientations showed a more pronounced grudge against the state during the acute phase of the crisis.

5. Discussion

It should be noted that the Belarusian government and the long-term President had kept the economic situation within the framework of relative stability and prosperity of citizens despite the global financial and economic crisis in all European countries. However, in 2011 they had failed to protect the citizens from financial loss and psychological stress, which is reflected in the results of our study of youth consciousness. Belarus has seen huge queues to exchange currency (financial panic). Citizens were buying food and household goods (consumer hype). The authorities' professionalism and political flexibility were sufficient to overcome the crisis and not be in a situation of "color" revolution. (It might be like in Ukraine now).

Nevertheless, thanks to the strength of the stock of political conservatism and statehood and the effectiveness of social control (law, morality, traditions), the political resentment of youth hasn't transformed into destructive forms of political behavior. The result, which we received corresponds to the data Leiser et al (Leiser & Bourgeois-Gironde and Benita, 2010), according to which of the factors affecting the dynamics of the crisis in the country, a factor of State's non-interference in the development of the crisis is essential and not positive. At the same time, an important role in overcoming the consequences of the crisis was played by such qualities of Belarusian mentality as patience, hard work, discipline and responsibility.

The concept of "tense system" (Ross, L., & Nisbett, R., 1991), as well as "unbalanced system" ("citizen-state"), "paternalism" and others may be useful for the analysis of the psychological causes of a favorable outcome of the crisis in 2011.

6. Conclusions

The research that was carried out has proved that semi-projective methods are effective in studying the everyday political and economic consciousness. It is advisable to monitor the state of consciousness of certain social groups, especially the youth.

The financial crisis in Belarus led to a sharp decline of the authority of the government, but the experience of statehood and the effectiveness of the social controls (law, morality, traditions) prevented escalation of the situation. Behavior of citizens in crisis situations is determined not only by situational factors, but also by mental peculiarities.

With regard to the values of students, the collectivist orientation was largely associated with the grudge against the state.

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PSYCHOLOGICAL SUPPORT FOR REFUGEES: POLITICAL IMPLICATIONS IN THERAPEUTICAL ISSUES

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Abstract

Lots of immigrants come to Europe every year. Refugees are the ones, who have suffered most. They had bad experiences in their home countries, and are marginalized in the host countries. This situation is a challenge for psychologists as well as for politicians.

Methods: Psychological Approaches are presented that belong to the broad issues of refugee support. It is shown that clinical issues have to be considered as well as social psychological and cross-cultural issues and questions of legal and moral evaluation. The concept of trauma and posttraumatic Stress Disorder (PTSD) has to taken into the context of injustice and violence, the legal aspect of the Recogniton of a refugee (to be granted refugee status) has to be considered regarding the personal recognition of the individual and his/her participation in the host society. In Practice, the restrictive situation during the period of asylum application is considered. Examples are given from individual therapy and the psychologists role in the therapeutical re-construction of the violation of human rights and the advocacy function within the legal procedures, as shown in political documents. The individual experiences are related to the framework of the legal and political situation in European and national laws. Restrictions within the health system and questions of marginalization are discussed

Conclusions and Discussion: It is conclude that the refugee issue is challenge for the psychologist, who must adapt his concepts in diagnosis and therapy to meet the refugees needs. Clinical as well as cultural issues have to be seen also from the political perspective. The psychologist must include these aspects as an integral part of his/her help and must offer his/her experience with refugees to politicians to help them to find adequate solutions that are in line with the European values of peace and humanity.

Keywords: Trauma, Therapy, Policy, Health, Refugees.

DISSOCIATIVE AND FUNCTIONAL AMNESIAS: COGNITIVE, EMOTIONAL AND PSYCHOSOCIAL CHANGES

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Abstract

Dissociative (conversion) disorders have over the years been undiagnosed, misdiagnosed or regarded as seldom occurrences. Recent epidemiological surveys however suggest that they might not be as rare as previously thought. In specific risk populations conversion disorders attain prevalence rates of up to 50% and the prevalence rates for dissociative amnesia range up to 7%. Herein we provide a review of cognitive, emotional and psychosocial changes in patients with dissociative or functional amnesia by drawing on results from about four dozen patients, who were investigated by our working group. The patients' age ranged from 16 years to 54 years, with most cases clustering in the third and fourth decade. Gender ratio was roughly one. Most patients showed a chronic course, at times lasting for more than a decade. A history of recurrent stressful life events during childhood or youth was either confirmed or considered as very probable. At times a seemingly minor physical injury (e.g. mild traumatic brain injury) precipitated the onset of amnesia. Patients were assessed with standardized tests for mood, personality and psychopathological and psychological load screening (e.g. Beck Depression Inventory, Freiburg-Personality-Inventory, The Symptom Checklist Revised or SCL-90R). Psychiatric diagnoses were achieved in conformity with criteria of psychiatric diagnostic instruments (e.g. SCID). A comprehensive neuropsychological test battery was administered over a period of up to two consecutive days. Aside from assessing various memory functions, tests included measures on intelligence, attention and concentration, executive functions, problem solving abilities, risk taking behavior, language, visuo-constructive abilities, theory of mind capacities, emotional processing and social behavior. With respect to memory, short-term and working memory and long-term memory functions were evaluated. Long-term memory assessment comprised verbal and non-verbal tests, tests of anterograde (new) and retrograde (old) memory. Retrograde memory was assessed with an Autobiographical Memory Interview for episodic-autobiographical past experiences and autobiographical-semantic knowledge and tests on famous faces and famous events for retrograde semantic memory. Furthermore, several (verbal and visual) tests to assess malingering/feigning and effort were given. All patients underwent conventional structural brain magnetic resonance imaging. A number of the patients also underwent functional brain imaging (fMRI, PET).
Findings pointed to persistent and severe retrograde amnesia in the episodic-autobiographical domain in most patients, which was accompanied by (usually) transient semantic amnesia. In three patients the reverse pattern was identified – profound and lasting anterograde amnesia in the absence of retrograde amnesia. Mood symptoms encompassed symptoms of major depressive disorder, subclinical depressive symptoms or a blunted affect and lack of concern about amnesic symptoms. Impairments in executive functions, theory of mind, and processing of emotional stimuli were identified as well. Conventional structural imaging results were unremarkable, but data from functional imaging pointed to metabolic alterations in brain areas involved in mnemonic processing. We conclude that our findings paint a picture of dissociative or functional amnesic conditions that departures in several ways from the lore propagated by psychiatric textbooks, but converges with Janet's view of hysteria as a malady of "personal synthesis".

Keywords: *Mnestic block syndrome, Functional brain imaging, Executive functions, Assessment, Rehabilitation.*

1. Introduction and memory systems

The term dissociative amnesia designates a form of psychogenic amnesia that has as bedrock the psychological mechanism of dissociation [1, 2]. The phenomenology and clinical picture of dissociative amnesia illustrates the fact that memory is not a single entity, but can be partitioned along content and time axis, respectively (for a review of the memory systems and their neural correlates, see ref. [3]). Apart from time-related categorization of memory into short-term and long- term memory, there is another well-acknowledged division along the time axis, namely that between anterograde and retrograde memory, or new and old memory, respectively. Most dissociative or functional amnesias are of retrograde type. They involve an inability to consciously retrieve previously stored episodic information, pertaining to personal experiences or events. We have, however, also studied cases with anterograde functional amnesia [3-5].

Along the content dimension, the popular content-based classification of Endel Tulving espouses the existence of five long-term memory systems, which are regarded to build-up on each other phylo- and ontogenetically [6, 7]. These five memory systems are procedural, priming, perceptual, semantic and episodic-autobiographical memory system, respectively. They distinguish themselves by a different niveau of consciousness (such as autonoetic consciousness for the episodic-autobiographical memory system, noetic consciousness for the semantic and perceptual memory systems and anoetic for procedural and priming memory systems, respectively) and self, and distinct or partly distinct neural correlates. Wheeler, Stuss, and Tulving [8] defined autonoetic consciousness as the capacity "that allows adult humans to mentally represent and to become aware of their protracted existence across subjective time" (p. 335). They demarcated autonoetic from noetic (knowing) consciousness – which refers to the awareness of symbolic representations of the world, and from anoetic consciousness – that denotes the simple awareness of external stimuli.

Semantic memory, which was also named „knowledge system" or is context-free and refers to general facts. Episodic memory is construed as the conjunction of subjective time, autonoetic consciousness and the experiencing self [6] and subsequently the episodic memory system is currently viewed as being equal with the episodic-autobiographical memory system. Autonoetic consciousness brings about a "sense of self in time and the ability to relive subjective experiences from the encoding context by mentally travelling back in time" (p. 260) [9].The earliest episodic-autobiographical memory usually dates back to age 3.5 years. Maturational changes of episodic-autobiographical memory (e.g. related to autonoetic consciousness and chronesthesia) extend however beyond childhood into early adolescent years [10,11] and are reflected at the brain level by ample structural and functional reorganization of elements of the brain networks supporting episodic-autobiographical memory, autonoetic consciousness, chronesthesia and self-referential processing.

2. Cognitive changes in dissociative amnesia

The most afflicted memory system in dissociative amnesia is the episodic – autobiographical memory system. Patients with dissociative amnesia show impairments of episodic-autobiographical memory, which usually are of retrograde nature and could span the entire past life or could be restricted to specific periods. In other words, patients lose conscious access to their autobiographical life or portions of it (mnestic block syndrome). This condition may be reversible or may persist over decades. We found that the autobiographical-semantic knowledge (such as the knowledge about own name, date of birth etc.) may at the beginning be impaired, but then it is quickly re-learned and regained. Old general world knowledge may be unimpaired or affected in variable degrees. Mnemonic processing within the priming

and procedural memory system respectively is usually intact [5, 12, 13]. Aside from the memory impairment, we identified in a substantial number of patients with dissociative amnesia problems with executive functions (e.g. cognitive flexibility) [5, 12, 13]. A number of cognitive functions (reading, writing, and calculating) were however found to be intact.

3. Changes in self in dissociative amnesia

We described various impairments of self and self- referential processing in patients with dissociative amnesia, such as a profound loss of personal identity, a decreased ability for self-reflection due to a dissociative narrowing of consciousness, decreased ability for self projection and anomalous self face processing [2,4,5,12,13]. The latter we linked to a right hemisphere dysfunction [2, 4, 5, 12, 13]. Keenan and colleagues [11] argued in 2005: "The evidence that there is a right-hemispheric bias in terms of self-awareness is overwhelming." (p. 700) and further, "that the right hemisphere is dominant for higher-order consciousness" (p. 702). In dissociative amnesia with pronounced retrograde memory impairments, we found evidence of defective synchronization during retrieval between processing of affectively-loaded personal events (that is assumed to preponderantly engage the right hemisphere) and fact-based processing (that is considered to preferentially recruit the left hemisphere) [5, 12, 13]. This synchronization abnormality not only was held responsible for a memory blockade, but also for a shrinkage of self and loss of autonoetic consciousness in dissociative amnesic conditions. This had already been emphasized by Harry Stack Sullivan [14]; he stated: "In the fugue, the self is involved, but the consciousness is not of the type to which I would refer as fully developed. Paradoxically, there may be conscious involvement of the self without the degree of integration to which we may apply the term self-consciousness in its usual sense." (p. 28).

4. Emotional changes in dissociative amnesia

We identified in some patients with dissociative amnesia co-morbidities with affective disorders (major depressive disorder) or subclinical depressive symptoms and conjectured that they may have as foundation a shared neurobiological mechanism [15, 16, 17, 18]. In other patients we observed a lack of concern with the amnesic condition, reminding of old descriptions of "indifference", "happy" unconcern or affect blunting in patients with formerly named hysterical conditions [2, 16, 17,18]. When we used a German language version of the Florida Affect Battery [19,20], we elicited difficulties with emotional processing [5,16]. Neither findings of affective symptoms in patients with dissociative amnesia nor findings of emotional processing difficulties came however as a surprise. Although Tulving [6] in his most recent definition of episodic memory did not mention the word "emotion", Markowitsch has frequently emphasized in his writings the intimate relation of episodic memory with emotion [21,22]. He furthermore underlined the adaptive and survival functions of episodic memory. In 2008, Markowitsch [22] stated: "Emotions are a central part of the episodic–-autobiographical memory system: events that go to our hearts or that revolve our guts are seen as those which become burned into our brains and which influence our future decisions" (p.159).

5. Changes in social information processing (social cognition) in dissociative amnesia

Our preliminary data indicate that patients with dissociative amnesia show variable degrees of impairments of components of social cognition, which might bear relations to their co-morbid conditions (e.g. concurrent clinical or subclinical depression), types of memory impairments (e.g. the extent of retrograde amnesia,

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presence of autobiographical semantic deficits), personality characteristics, neuropsychological profile (performance on executive functions or emotional processing) and testing paradigms[5, 13, 16,18]. We identified changes in theory of mind functions in a substantial number of patients with dissociative amnesia [5, 13, 16,18]. Although they are preliminary, these findings might have meaningful implications for the rehabilitation of these conditions.

6. Conclusions

Our data suggest that in dissociative amnesia the changes may go beyond the memory impairment, extending to the emotional and behavioral domains and areas of social cognition. The phenomenology of dissociative amnesia offers therefore a powerful example that self, autonoetic consciousness, emotion and episodic-autobiographical memory are tightly interlocked [16, 17] and furthermore speaks for a possible contribution of the episodic-autobiographical memory to the complex landscape of social cognition [17].

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VIOLENCE AS A BOND: FROM ACT TO REPETITION

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Abstract

Violence is inherent to all human beings and even constitutes an intrinsic part of individuals when establishing the first parental bonds. When it is not sufficiently symbolised and overcome, a possible outcome is to position itself as an act. In this article, we seek to demonstrate the consequences of conjugal violence on the future of a child who witnesses this act. Indeed, such a child is confronted by a puzzling relationship between his/her father and mother based on violence, and in addition, is caught up in the shock and the silence that are sources of trauma. Thrust in cross-generational issues where violence is bonding, one possible destiny is that this violence is put into act. Mr Ritti whose story is told in this article enables us to highlight the conscious and unconscious stakes at play within the mechanism of cross-generational repetition. Through our analysis, we also seek to show to what extent emerging from this victim-perpetrator dichotomy makes it possible to gain access to the domestic scene of both the individual and of the family, and undo the complexity of the issues to some extent, when each one is engaged in one way or another in a dimension driven by destructive violence.

***Keywords:** Marital violence, Child, Psychic transmission, Trans-generational, Repetition.*

1. Introduction

In this article, we will consider domestic violence from the angle of the psychopathology of a bond. Namely when the violence constitutes the link and has effects on the following generation. In order to understand violence within the family nucleus, our work is focused on the way they are transmitted consciously as well as unconsciously. The "acted violence", as we will call it, is indeed characterized by the fact it is repeated by the following generation. In France, the report Henrion (2001), the works in the United States (Wood & Sommers, 2001) and in Canada* (Fortin, 2009) are centred on the children called "witnesses" or "exposed" to domestic violence. These researches establish the importance of the behavioural difficulties these children present, and the risk that the domestic violence be reproduced by the following generation. The child who witnesses domestic violence would often turn out to be an "adult-aggressor". Thanks to a precise example we will develop how it is at stake during the childhood and then during adulthood. To witness domestic violence and to live in this environment creates an enigma for the child, regarding the acting person as well as the victim. The child is trapped when the violence is finally acted. The words are missing. Stuck in a dead-end, the child is not able to symbolize the violence. As a result, it acquires a traumatic dimension while symptoms and sufferings emerge. That is what we can notice when it is repeated by the following generation.

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* The authors of this paper were awarded with the Mustela Foundation award
* The 2006 law for the Protection of the youth, in Quebec (Gouvernement de Québec, 2009) established that the domestic violence are to be considerate as a form of ill-treatment toward the child (Racicot et al., 2010).

1.1. The violence from a psychoanalytic point of view

Violence in general refers to the infantile domain, it is inherent to the human being, it inaugurates the encounter with the mother, and it constitutes the creation of the first bonds. There are three fundamental aspects: the primal violence, the primary violence and the fundamental violence.

The primal violence: "We are (…) as the primal men, a horde of murderer." (Freud, 1915/1988, p.154). With reference to Freud's theory of the myth of the primitive horde, every child has to deal with the primal question of the violence. Primal insofar as the humanization process arises from this violence. As for the child who inherits what his forefathers, and above all, what his parents, have done of this violence. (the way his forefathers, and especially his parents, have dealt with this violence) Have they repressed it, phantasized it, or acted it? From a psychical point of view, the child's humanization process goes through the internalization of the laws allowing him to handle his destructive drives. At the end of the Oedipus, the psychical law gets a function of structuring.

Our point concerning the children, who grow up witnessing the violence acted by their parents, is to study how they internalize it regarding to its forbidding aspect. It is with this aim that we will interest ourselves in the constitutive violence or normal in the bond between parents and children.

The primary violence or the maternal bond: In Piera Aulagnier's works (1975/ 1995), primary violence is rooted in the speech the mother addresses to her baby, who is, at that age, unable to get the meaning of it. "Primary violence is the psychical act of imposing to someone else's psyche, a choice, a thought or an action only motivated by one's own desire." (p. 40) Primary violence lies between one's desire (the mother's) and one's need (the child's). It is a necessary violence since the signification the mother gives to the needs of her child allows him to find the meaning of what he is living.

Moreover, the mother always stands as missing and unsatisfying; thus, it gives the child the possibility to discover its own existence. For the child, the hatred impulse toward his mother emanates from this very frustration. Freud summarized this question saying "The bond to the mother leads to hatred" (Freud, 1932/ 1989, p.129), fundamental hatred which goes on in the relation with the father.

The fundamental violence or paternal bond: It is Jean Bergeret (1984) who introduced the notion of fundamental violence. This positive violence takes place in the child's imaginary during the oedipal phase. The father appears as an "annoying rival" because he holds and transmits the law forbidding the incest and the murder. He hands on a Law to which he, as well as the mother, is submitted. It is based on the fundamental forbidding of having a link of destruction or possession of the other one. Consequently, the father reinforces the limits and the castration already presents in the mother-child bond. He compels and thus helps the child to handle his drives, concerning love or hate equally. In other words, he brings the child round not to yield to his destructive drives. He places the containing limit and check on the primal and primary violence.

2. Objectives

In this psychical context, what is the effect of the acted parental violence on a witness-child? That is the subject we are to develop through the example of Mister Ritti's story, met within a research in psychology.

2.1. When primal hatred becomes violence

"The man is rarely entirely good or bad" (Freud, 1915/ 2010, p.136). The acting of one member of a family results of an insufficiently structured forbidding, thus unable to counter destructive drives. The familial bond does not rely on the dialogue or the triangulation. The law of the strongest is sovereign in a dual relationship, without a third

party. This pathological mechanism is linked to a failure in the early creation of the bond.

The child who witnesses domestic violence, witnesses this dual relationship dominated by the law of the strongest. He can observe two people: one is dominated and withdrawn; while the other one is dominant and overwhelming. The child experiences anxiety and a trauma in the same time, since the real violent scene confronts him to his own archaic fantasies of violence. The trauma is due to the real acting of what was to stay merely imaginary. This effraction of the psychism through the reality impedes the event to be voiced and thought by the child, who stays struck by this traumatic event. There is an important risk of a repetition of this violence through the generations. This research aims to explain the psychical mechanism at the origin of it.

3. Design

We have chosen to resent Mr Ritti's testimony, realized within a research[†] carried out among five adults, who have witness domestic violence while they were children. Without pretending to establish generalizing statements, we can perceive fundamental psychical mechanism working in the trauma and the repetition. Thanks to this research, we can intent to assume how to accompany and prevent this violence.

4. Method

Concerning the method, we have collected testimonies thanks to non-directed interviews, which we have analyzed on their content and discourse planes. We have selected Mr. Ritti since he is representative of this population. Around forty years old, he has given us a testimony of his past as a child, then of its actual marital life. He is recently separated from his wife, who has registered a complaint against him on the ground of domestic violence. Mr. Ritti's father exerted repeated violence over his wife, who then escaped with a friend, but leaving her children behind. The father has made them follow him to his native country, lying about the situation. There he was imprisoned for the murder of the mother's companion. As a result, Mr. Ritti has spent eleven years without any of his parents, as his mother couldn't legally take her children to France. In the course of the interview, he is deeply moved by evoking these difficult moments, since the time has not softened the pain.

5. Results

5.1. Witness-child and the violence transmission

Culpability and reproduction: He describes his situation of witness-child expressing a lot of culpability: "My brothers and I, (we) asked ourselves how we could make this violence stop. But in fact, we have never intervened. The powerlessness is what annoys me. According to me, it is a form of failure to render assistance to a person in danger." Mr; Ritti was less than six years old at the time, and when asked what he could have actually done at this young age, he answers: "I don't know, we could have done something, call the police or the neighbours." It seems that he is reversing the generations, since as a child, he felt responsible and guilty of witnessing his mother being aggressed. Now that the children are adult, the violence has gone on the next generation: "My sister happen to be with violent men." He is himself pursued because of the plaint registered by his wife. However, in his mind the violence exerted by his father and his own are not similar since his violence would be justified, on the contrary of his father's: "It is a different story; my father beat my mother gratuitously.

[†] (cf. research works by Nancy Sawan, student at the Louis-Pasteur University of Strasbourg, under the direction of Claire Metz, 2008-09)

My mother was a kind woman. My wife is dangerous, she has even registered a plaint against me, and she has hidden medical certificates. A loving wife does not hide, that is a real treason." According to him, he is violent because of his wife, she is the responsible: "I can't forbid her having complaining because I beat her. She provoked me, she pushed me to my limit in order to be beaten and then she went to see the doctor and cry. There is no respect; it is war, rifle against rifle. Maybe this is what the human is: it is the other, or it is me." Mr. Ritti is stuck in a logic of duel, in a power struggle similar to the one of his parents he assisted to.

Familial silence: We think that the lack of words has contributed to this repetition though the generations. He was not able to create a representation of the violence, to identify it, to think it. Indeed his abused mother "didn't say anything, always played down the situation, in order not to frighten us and comfort us. The following day was quiet, she prepared the breakfast for us, nobody spoke about it… My mother always told us that she didn't want to leave because of us." Mr. Ritti describes a helplessness mother, in the incapacity of speaking to the children. We can understand the difficult situation of this woman; nevertheless she made her children feel guilty by telling them she stayed for them. They did not have any word at their disposal to think what was happening to their mother, what was happening to them. They were exposed to the hard facts, as savage as they were. This silence kept the confusion going on, making the children feeling guilty.

Paternal discourse: On the other hand, his father justified his violence: "he said it was because of the house, that he did not feel at ease in this house, but as the neighbours often intervened, we had to move. These things have followed me endlessly since that time, the fear, the instability, incessantly having to build up again, leave come back." His father had his reasons. They faced the maternal silence and a father justifying his acts of violence at his pleasure. As a consequence, the children felt guilty.

It looks as if the violence experienced in the past was to be repeated by the following generation. As a matter of fact, Mr. Ritti presents his current situation as his father used to do: "As far as the violence is concerned, I think that my children realized I am right." He is trapped in this confusional logic, thinking the abused wife is responsible of the blows she receives and the violence can be explained and forbidden.

Fright and fascination: This father has aroused ambivalent affects : "When I was a child, I have regularly assisted to violent scenes between my father and my mother with my four sisters and my brother… he went back home, mean, irritated and took it out on my mother like that, gratuitously… that was frightening… He was strong and powerful." This violent father has aroused fright but a kind of admiration as well in his son. He speaks about a totalitarian and omnipotent, unable to inhibit his fundamental violence, but through this description we can perceive a certain fascination for this father, which he said was strong, powerful; fascination going along with the fright. These two dimensions, love and hate for the father, have favoured the identification mechanism to the aggressor. Love leads to the identification, and the latter allows the child to handle the anxiety felt while witnessing domestic violence. However this mechanism transforms the child, using as a model his violent father, which in the end causes the reproduction of domestic violence during adulthood.

Identification and splitting of the ego: Mr. Ritti has identified with the aggressor according to the words of Anna Freud (1936/ 1990), using easily spotted defence mechanisms. On the one hand the denial: "I do not want to be like my parents." Negation because this affirmation suggest that in the meanwhile, he perceives he is like his father and this thought is immediately rejected. The identification to the aggressor, on the other hand, constitutes an answer to a trauma, under the form of a splitting of the ego in this situation of fear and extreme distress. "When that fear reaches its climax, forces them to submit automatically to the will of the aggressor, to try and guess his lesser desire, to obey while completely forgetting themselves and

identifying entirely to the aggressor." (Ferenzci, 1982, p.130). The aggressor and the situation of aggression then become intraphychical, they do not exist as standing reality anymore but turn into a part of the ego. Two parts of the ego coexist separately, and in a contradictory way. That is the way Mr. Ritti explains his own violence: "Sometimes I don't even know myself, there are unknown parts in me, the words are missing." The splitting allows him to maintain the paradoxical idea that he does not reproduce the violence of his father with his mother, while hitting his wife.

The impossible transmission of the law: Concerning the transmission of the law, the relation the father has with is to be taken into account: a tyrannical father impedes the paternal function to work since he does not represent the law anymore while embodying it. The tyrannical father can take place on the positive side of perfection, as it is the case for the President Schreber's father (Tabouret-Keller, 1973), or on the negative side of unbelievable brutality, as for the lance corporal Lortie's father (Legendre, 1989). Mr. Ritti was confronted, as a child, to a father laying down the law rather than representing it. It was thus impossible for him to transmit it and hard to take it over.

Mr Ritti's specific case alerts us on the psychical risks run by his children. Assisting mutely to the horror, victims of mental manipulations from one or the other parent, they are unable to think, because of the sideration they feel for their father, above all when the situation is made worse by the silence. This situation underlines how important is the risk for this violence to be repeated by the following generation.

6. Conclusion

To conclude, we will say that the violence is a positioning in the relation to the other one, even before being an act. Regarding the domestic violence it is essential to question the place of the violence within the family and to understand why it creates the bond. That was the purpose of this text.

The child who witnesses domestic violence is stuck in this violence, unable to work it out or to go past it. Therefore, preventive measures would aim to help this violence to be verbalized since childhood so that the identifications and the bonds would not turn toward violence and destruction, and the repetition would not reappear for the next generation.

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OSTRACISM EFFECTS IN CHILDREN AND ADULTS WITH HIGH FUNCTIONING AUTISM

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Abstract

Introduction. High-functioning autistic (HFA) individuals are frequently reported to express difficulty with understanding others' communicative intentions and emotions. The source of this deficit is difficult to pinpoint, since affective and social processes are diverse and primarily defined by what they are not (cognitive). *Purpose of the Study.* Our goal was to understand (i) where the affective and social interaction domain breaks down in HFA and whether social cognition and emotion-regulation abilities in HFA adults are (dis)continuous with those observed in HFA children, and (ii) highlight a possible dissociation between cognitive and social-affective subparts in the Theory of Mind construct through HFA. *Method.* Eleven HFA adults, ten HFA children and two groups of chronological age-matched controls participated in the Cyberball game, a method of inducing ostracism in laboratory settings. Each participant identified with a computerized agent participating in ball-tossing with two other players. The participant either received the ball (*inclusion condition*), or got completely excluded (*exclusion condition*). After the game, participants were asked to fill a reflexive questionnaire assessing their perceived social needs and emotions. *Findings and Results.* Several features of social adaptation in the ostracized condition were found to be unimpaired in both HFA groups when compared with the controls. However, HFA participants' emotional responses to the Cyberball game were found to be disproportionally inappropriate, with HFA adults showing gross deviations from the pattern exhibited by their age-matched controls in perceived emotions. *Conclusions.* The findings point towards a discontinuity between social cognition and affect in HFA. Crucially, this dissociation was found to be more striking in HFA adults relative to HFA children.

Keywords: Autism, Ostracism, Emotions.

1. Introduction

While definitions vary, there is general agreement that Theory of Mind (ToM) involves recognizing that others have sensations, desires, knowledge, thoughts and beliefs, and that these are products of each individual's unique experiences. Understanding others' thoughts and feelings is usually expressed through the use of mental state terms, which are words that describe the internal feelings and thoughts of others. Mental state terms can be divided into two broad subcategories, such as emotional or affective terms (*happy*, *sad*, *feel*) and cognitive ones (*think*, *remember*, *know*).

Deficits in the ToM construct have been acknowledged as one of the core features of autism and they have often been observed in high-functioning children with no syntactic or lexical impairments. In essence, the ToM deficit states that individuals with autism fail to impute mental states of others, and that this deficit manifests as inability to mentalise or failure to take into account others' mental states (Baron-Cohen, Leslie, & Frith, 1985). A global ToM deficit would be expected to have wide-ranging effects on the individual's social cognition besides her/his emotional regulation difficulties, with some neuroimaging studies showing that HFA children may not automatically use language to encode their social understanding, thus, making expression and generalization of social knowledge more difficult (Carter, Williams,

Lehman, & Minshew, 2012). Despite their significant social difficulties, both children and adolescents with HFA have self-reported equivalent levels of distress with TD controls under experimental conditions of virtual social exclusion (Kuusikko, Pollock-Wurman, Jussila, Carter, Mattila, Ebeling, Pauls, & Moilanen, 2008).

Though the aforementioned studies showed that both HFA children and adolescents were vulnerable to the effects of social exclusion, how children at middle childhood (i.e. 8-10 yrs. old) and adults with HFA differ from TD age-matched children and neuropsychiatrically healthy adults, respectively, in their responses to social rejection is poorly understood. The aim of the current study was to investigate, first, whether HFA children's and adults' patterns of responses to social rejection would be different depending on the type of mental state language used (i.e. cognitive vs. affective), and, second, whether the two experimental groups would be distinctly affected by social ostracism due to the age difference.

2. Method

2.1. Participants

The sample comprised 10 HFA children (2 females, age range: 8;1-9;11, Mean age: 9;4, *SD*: 1.9; WISC III-general IQ index: 99.4; *SD*: 8.5) and 11 HFA adults (1 female, age range: 18;9-55;6, Mean age: 24;7, *SD*: 10.5; Raven's (1938) mean score: 57.3; *SD*: 2.5). All HFA children had a pre-existing diagnosis from a child psychiatrist and met criteria for autism spectrum disorders on the Autism Diagnostic Interview-Revised (ADI-R; Lord, Rutter, & Le Couteur, 1994). They had a full scale IQ of 96 or higher assessed by the Greek version of the Wechsler Intelligence Scale for Children (Wechsler, 1991). HFA adults either received HFA diagnosis in childhood or were diagnosed in adulthood by autism-specialist centers in Greece using ICD-10. In addition, all of them were screened for the current study using a battery of ToM tests on beliefs and emotions (first- and second-order cognitive and affective ToM tests) and were found to score significantly lower that TD control adults in second-order ToM tasks testing their ability to attribute beliefs and affective mental states to others. Both HFA groups were chronologically age-matched with two control groups; the two groups included 10 TD children (3 females, age range: 8;5-9;9, Mean age: 9;3, *SD*: 1.6; WISC III-general IQ index: 101.0; *SD*: 5.3) and 11 neuro-psychiatrically healthy adults (1 female, age range: 18;3-51;3, Mean age: 28;2, *SD*: 10.8; Raven's mean score: 50.2; *SD*: 4.4). All experimental procedures were carried out in accordance with the Declaration of Helsinki (1975/1983), and adult participants as well as parents of children provided written consent.

2.2. Method

Experimental data was collected by using the Cyberball game (Williams, Cheung, & Choi, 2000) in which participants are led to believe that they are playing an online game with three other players, though all ball tosses are predetermined. Players were represented on the computer screen by cartoon drawings, with the participant's drawing always being placed at the bottom center. Each individual participated in two versions of the game. In the inclusion condition, participants were in possession of the ball around 23% of the time. In the ostracism condition, the other players were initially programmed to throw the ball to the participant with equal probability; however, after the first eight throws, they stopped throwing it to the participant altogether for the remainder of the game. The game comprised 70 ball tosses for each condition (i.e. inclusion vs. ostracism). The ostracism condition was administered to each participant one week after the inclusion condition.

Immediately after the end of each game paradigm, the participants were asked to complete the Need Threat questionnaire (Williams et al., 2000) by rating how much s/he agreed with 20 statements on a scale from 1 to 5 (1 corresponding to "Not at all" and 5 to "Extremely"). The specific statements assessed the extent to which inclusion and ostracism affected the individual's social needs, namely, the need of belonging,

self-esteem, meaningful existence and control. In the same self-report questionnaire, participants were also asked to rate how good/bad, friendly/unfriendly, angry/pleased, and happy/sad they were feeling on a scale from 1 to 5. These anchors comprised the Mood section of Williams et al.'s (2000) Need Threat questionnaire.

3. Results

Descriptive statistics of the groups' mean scores on the four social needs and mood for each condition (inclusion vs. ostracism) are reported in Tables 1 and 2, while descriptive statistics of their scores on the eight affective terms (good, bad, friendly, unfriendly, angry, pleased, happy, sad) which fall under the "mood" umbrella are reported in Tables 3 and 4 for the inclusion and the ostracism condition, respectively.

One-way analyses of variance (ANOVAs) with task condition (inclusion vs. ostracism) as the independent variable were first conducted separately for each group to examine the extent to which each of the four social needs and mood were threatened by social exclusion (see Tables 1 & 2). Healthy adults appeared to be significantly affected by ostracism across all four needs and mood ($p<.048$). On the other hand, social exclusion increased belonging, self-esteem, meaningful existence and mood threat ($p<.05$) for TD children, but not control threat ($p=.241$). Both HFA adults and children exhibited similar patterns of performance, since ostracism appeared to increase threat for all four needs ($p<.006$), but not mood ($p>.174$). Indeed, between-group comparisons for each condition revealed a highly significant group effect ($F(3, 327)=4.977$, $p=.002$) for the mood category in the ostracism condition only; such effect has mainly stemmed from the fact that healthy adults scored significantly lower than both HFA adults ($p=.002$) and HFA children ($p=.022$). Moreover, the same analyses of the groups' scores in the ostracism condition have yielded a significant group effect for meaningful existence ($F(3, 204)=7.942$, $p=.000$) which was due to HFA children's and HFA adults' considerably lower scores in the specific need relative to TD children ($p=.001$) and healthy adults ($p=.017$), respectively. There was also a significant group effect for control ($F(3, 204)=3.699$, $p=.013$); post-hoc analyses revealed that such effect stemmed from HFA adults' considerably lower scores than HFA children in the specific category in the ostracism condition.

Table 1. Mean scores (raw data & standard deviations (*SD*s) of the experimental groups' scores in needs and mood in the inclusion condition.

Inclusion condition					
Groups	belonging	self-esteem	meaningful existence	control	mood
HFA children	3.8 (*1.3*)	3.8 (*1.3*)	3.9 (*1.4*)	3.9 (*1.3*)	3.4 (*1.6*)
TD children	3.7 (*1.2*)	3.6 (*1.1*)	4.1 (*1.2*)	3.2 (*1.2*)	3.1 (*1.4*)
HFA adults	3.9 (*1.3*)	3.8 (*1.4*)	4.0 (*1.4*)	3.6 (*1.4*)	2.8 (*1.4*)
healthy adults	3.9 (*1.2*)	3.9 (*1.0*)	3.9 (*1.1*)	3.2 (*1.3*)	2.9 (*1.8*)

Table 2. Mean scores (raw data & SDs) of the experimental groups' scores in needs and mood in the ostracism condition.

Ostracism condition					
Groups	belonging	self-esteem	meaningful existence	control	mood
HFA children	2.4 (*1.5*)	2.2 (*1.5*)	1.8 (*1.1*)	3.1 (*1.7*)	3.0 (*1.8*)
TD children	2.3 (*1.3*)	2.7 (*1.5*)	2.9 (*1.4*)	2.9 (*1.4*)	2.7 (*1.3*)
HFA adults	1.9 (*1.3*)	1.9 (*1.3*)	2.2 (*1.5*)	2.1 (*1.5*)	3.2 (*1.6*)
healthy adults	2.0 (*1.0*)	2.3 (*1.4*)	3.0 (*1.4*)	2.6 (*1.6*)	2.3 (*1.2*)

Finally, one-way variance analyses with type of emotion as the independent variable were conducted on the groups' scores on the eight emotions that comprised

the mood category (see Tables 3 & 4), in order to clarify which affective state(s) was/were mostly affected by inclusion or ostracism. The analyses have revealed a significant emotion-type effect for healthy adults in the inclusion condition only (F (7, 79)=201.125, p=.000) which was mainly attributed to the fact that their scores for positive emotions (i.e. good, friendly, pleased, & happy) were significantly higher relative to negative emotions (i.e. bad, unfriendly, angry, & sad). Interestingly, HFA adults have exhibited the opposite pattern in their performance, since a significant emotion-type effect (F (7, 87)=6.836, p=.000) was only revealed for the ostracism condition; such effect has mainly stemmed from the group's significantly lower scores on feeling 'good' and 'happy' relative to feeling 'bad', 'friendly', 'unfriendly' and 'angry' (p<.01). HFA adults' affective mental state on the inclusion condition, on the other hand, appeared to be undifferentiated (p=.310). Finally, both TD and HFA children exhibited a significant emotion-type effect for both the inclusion ((F (7, 79)=2.635, p=.018 for TD children, and (F (7, 79)=9.319, p=.000 for HFA children) and the ostracism condition ((F (7, 79)=82.815, p=.000 for TD children, and (F (7, 79)=10.876, p=.000 for HFA children). With respect to the inclusion condition, HFA children appeared to score considerably higher on feeling 'friendly' and 'happy' relative to negative emotions (p<.03), (i.e. bad, unfriendly, angry, & sad), while TD children scored higher on feeling 'friendly' and 'pleased' relative to feeling 'unfriendly' (p<.05). With respect to the ostracism condition, HFA children have scored considerably lower on feeling 'friendly' and 'happy' relative to negative emotions (p<.017), while TD children tended to score considerably higher on all negative emotions relative to positive ones (p=.000).

Table 3. Mean scores (raw data & *SD*s) of the experimental groups' scores in emotions comprising mood in the inclusion condition.

Inclusion condition								
Groups	good	bad	friendly	unfriendly	angry	pleased	happy	sad
HFA children	4.2 (0.8)	2.4 (1.5)	4.7 (0.5)	1.6 (0.8)	2.8 (1.9)	4.2 (0.9)	4.6 (0.5)	2.6 (1.8)
TD children	3.6 (1.1)	3.4 (1.7)	3.8 (1.2)	2.0 (0.7)	2.8 (1.5)	3.8 (1.2)	3.2 (1.5)	2.4 (1.1)
HFA adults	3.5 (1.6)	2.8 (1.4)	2.8 (1.6)	2.5 (1.5)	2.4 (1.5)	2.2 (1.0)	3.5 (1.6)	2.7 (1.1)
healthy adults	4.6 (0.5)	1.5 (0.7)	4.6 (0.5)	1.0 (0)	1.0 (0)	4.7 (0.5)	4.8 (0.4)	1.0 (0)

Table 4. Mean scores (raw data & SDs) of the experimental groups' scores in emotions comprising mood in the ostracism condition.

Ostracism condition								
Groups	good	bad	friendly	unfriendly	angry	pleased	happy	sad
HFA children	2.4 (1.6)	4.0 (1.3)	1.6 (1.3)	4.4 (0.8)	3.6 (1.8)	2.0 (1.6)	1.4 (0.5)	4.8 (0.4)
TD children	1.7 (0.5)	4.0 (0)	1.4 (0.5)	4.0 (0.5)	3.9 (0.8)	1.5 (0.5)	1.5 (0.6)	4.1 (1.3)
HFA adults	1.7 (1.4)	4.4 (1.0)	3.9 (1.6)	4.2 (1.5)	4.2 (1.4)	2.6 (1.7)	1.7 (1.1)	3.5 (0.7)
healthy adults	2.6 (1.3)	2.9 (1.5)	2.2 (0.9)	2.5 (1.4)	2.4 (1.1)	1.7 (0.9)	1.9 (1.0)	2.6 (1.3)

4. Discussion

The present study provides initial evidence of a deficit in the perception of affective mental state terms in both HFA adults and HFA children that were tested for the purposes of the present work, with the deficit in emotional language processing appearing to be more severe for HFA adults. More specifically, while experimentally induced ostracism appeared to affect both self-reported mood and three out of four

social needs (self-esteem, belonging, and meaningful existence) in both TD children and healthy adults, ostracism did not modulate overall mood in either HFA group. This means that while HFA individuals were as able as controls to recognize when they are being excluded from a situation by reporting significant need threat for social needs, they failed to interpret appropriately their current emotional state with an impact on understanding affective aspects of emotion words in the self-report questionnaire.

Indeed, a close look at HFA adults' mean scores on each of the eight emotions comprising mood in the ostracism condition shows that ratings on all negative emotions and two positive emotions, namely, 'friendly' & 'pleased', were very similar. Moreover, their considerably high ratings on the majority of the emotions involved (more specifically, the ratings were close to 4.0 on the 1 to 5 scale) implies that HFA adults have probably responded in a perseverative, highly idiosyncratic manner. HFA children's responses to emotions, on the other hand, have also revealed difficulties with understanding how the ostracism experience affected their current emotional state; for example, ratings on positive emotions (e.g. 'good' & 'pleased') did not differ from ratings on negative emotions. Nevertheless, HFA children appeared to be more successful than HFA adults at perceiving negative emotions, which was reflected in the child group's reverse rating for negative emotions in inclusion and ostracism.

5. Conclusions

The study provides evidence that modulation of social need threat takes place and can be reported by both children and adults with HFA. Nevertheless, evidence on the same individuals' ability to introspect on their affective mental state reveals a sharp discontinuity between responsiveness to social threat and affect. This discontinuity appeared to be more severe for HFA adults than 8-10 yrs. old children with HFA.

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MONITORING INSTRUMENT: TEXAS CHRISTIAN UNIVERSITY (TCU) CLIENT EVALUATION OF SELF AND TREATMENT (CEST) – PORTUGUESE VERSION

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Abstract

Background: Research has shown that appropriate treatment of drug addiction requires an effective evaluation and monitoring of patients during the recovery process. Comprehensive instruments specifically focused in monitoring of substance abuse treatment are scarce in Portugal.

Objectives: The main purpose of this article is adaptation and validation of the Texas Christian University (TCU) Client Evaluation of Self and Treatment (CEST) an instrument for assessing and measuring patient functioning and treatment perceptions for Portuguese context. The Portuguese previous version is a 93 item self-rating instrument that includes four overall indicators of effectiveness: (a) Treatment Motivation, (b) Psychological functioning, (c) Social functioning, and (d) Treatment engagement.

Method: The questionnaire was administered to a random sample of 608 subjects in treatment at the Intervention Service on Addictive Behaviors and Substance Dependence - Regional Northern Delegation.

Results: Exploratory factor analyses suggested four dimensions renamed: Therapeutic Progress; Negative Affects; Social Support and Peer Support. Results showed acceptable values of Cronbach´s alpha for the CEST scales (ranging from .78 to .90).

Keywords: Client monitoring, Drug and alcohol treatment, Treatment effectiveness, Validity.

1. Introduction

The drug and alcohol abuse takes on increasing importance in several national and global organizations (European Monitoring Center for Drugs and Drug Addiction, 2001; World Health Organization, 2008; Intervention Service on Addictive Behaviors and Substance Abuse, 2013). Historically, the substance abuse was considered a social problem in Portugal in the 70's. In the 80`s, this problem has increased due the trafficking of illicit substances that grew exponentially (Fernandes, 1998). According Negreiros and Magalhães (2009), Portugal had significant developments in last years, regarding drug abuse and drug addiction problems. In fact, a large number of intervention programs were developed, seeking answers for the substance abuse problem. Thus, intervention programs have changed, reflecting the rapid changes occurring in substance abuse contexts: the type of substance used; trends and patterns of drug use; and client profiles (see SICAD, 2013 for discussion).

These developments were also encouraged by a theoretical view less focused on abstinence and progressively more comprehensive. A comprehensive view of the drug addiction problem includes assessment and intervention in several factors, such as psychosocial, individual and idiosyncratic factors, contextual factors and factors related to physical and mental health (see Joe, Broome, Rowan-Szal, & Simpson, 2002; Simpson, 2004; Simpson & Joe, 2004; Joe, Rowan-Szal & Simpson, 2009 for discussion). Differing to these advances, tools and mechanisms to monitor the effectiveness of these interventions are very scarce in Portugal.

However, internationally, tools and mechanisms have been found to monitor several most important factors in the recovery process. Consequently, the research literature has collected several factors for this assessment:
First, the motivation for change, which is characterized by being a dynamic process (Prochasca & Diclement , 1982), is one of the most relevant factors for recovery process on addiction treatments (De Leon, Melnick, & Kressel, 1997). The patient psychosocial functioning is also considered as a predictor of success or unsuccessful of the recovery process. Furthermore, addictive behaviors are frequently accompanied by a poor level of psychosocial functioning. A poor psychological functioning can have a negative impact on the therapeutic engagement and maintenance of the patient under treatment (Simpson, 2004). Accordingly, it is recommended to monitor and to intervene in this issue during the therapeutic process (see Simpson, 2004 for discussion).

The research literature points at another dimension that must also be subject to monitoring, therapeutic progress. The researchers have sought predictors of this therapeutic progress and some of the most important seem to be: Conselling rapport; therapeutic engagement and treatment satisfaction (see Joe et al., 2009; Michie, Whittington, Hamoudi, Zarnani, Tober, & West, 2012; and Kelly, O'Grady, Brown, Mitchell, & Schwartz, 2010 for discussion). Finally, research literature shows that the social support network is an important predictor of treatment outcomes (see Simpson, Joe, Greener, & Rowan-Szal, 2000 for discussion).

Subsequently, in order to monitor the effectiveness of treatment programs in Portugal, we need a comprehensive instrument that assesses the factors emphasized in the research literature described above.

2. Objectives

The main purpose of this article is adaptation and validation of the Texas Christian University (TCU) Client Evaluation of Self and Treatment (CEST) an instrument for assessing and measuring patient functioning and treatment perceptions for Portuguese context.

3. Methods

3.1. Sample
The sample of 608 subjects was recruited from patients in treatment at the Intervention service on Addictive Behaviors and Substance Dependence (SICAD) - Regional Northern Delegation.

3.2. Materials
TCU-CEST – Texas Christian University - Client Evaluation of Self and Treatment (Joe et al., 2002; Simpson, 2004; Instrument developed as part of National Institute on Drug Abuse (NIDA) Grant R37 DA13093), a self-rating instrument that includes four dimensions: (a) Treatment motivation scales; (b) Psychological functioning scales; (c) Social functioning scales; and (d) Treatment engagement scales. On average, it takes 45-50 minutes to complete the questionnaire properly. For the answer format, this is a *Likert* scale of seven levels (*1- I strongly disagree to 7 - I strongly agree*).

4. Results

The final EFA revealed a four-factor solution which accounted for 54,4% of total variance. In this four-factor solution all items presenting communalities values higher than .35 and presented factor loadings ranging between .49 and .90. The final results show us that a short-form based on the criteria listed above, consists of 22 items

distributed among the following 4 factors (renamed): (F1) Therapeutic progress; (F2) Negative affects; (F3) Social support; and (F4) Peer support. The scale with the highest factor loading was Therapeutic progress, which accounted for 26,6% of the total variance followed by Negative effects (12,4%); Social support (9,2%); and Peer support (6,2%). According to the recommended default value of > .70 (Nunnally & Bernstein, 1994; Pestana & Gageiro, 2005), the analyses of the values obtained allow us that scales have suitable values of internal consistency, ranging from α=.78 to α=.90.

5. Discussion

Although our results show a different structure from the original, our final model also covers the main treatment effectiveness areas pointed out in literature: the first factor – we call *Therapeutic progress* - includes items which try to measure treatment engagement (see Lehman, Greener, & Simpson, 2002; Simpson & Flynn, 2007 for discussion), treatment satisfaction (see Kelly, et al., 2010 for discussion) and conseling rapport (see Joe, Simpson, Dansereau, & Rowan-Szal, 2001; Joe et al., 2009 for discussion). The second factor – we call *Negative affects* – includes items which try to measure the patient's characteristics and functioning (see Mclellan, Mckay, Forman, Cacciola, & Kemp, 2005; Simpson, 2004, for discussion), such as depression, hostility, and anxiety. Third and fourth factors – *Social and peer support* – seek to measure social and contextual factors that also affect recovery process dynamics (see Simpson Joe, Greener, & Rowan-Szal, 2000 for discussion).

6. Concluding remarks

We believe that the collection of information that arises from this evaluation and monitoring can allow us (a) the characterization of patterns of drug use; (b) the scientific evidence of the methods applied and the perception of its effect on the progress of the patient, (c) the development of better and more appropriate interventions, (d) the development of feedback mechanisms that promote best clinical practice, and (e) the orientation of the investments to be carried out in the treatment of addiction (Simpson, 2004; Machado, Klein, & Farate, 2005; Donovan, Bigelow, Brigham, Carroll, Cohen, Gardin et al., 2012; Moura, Ferros, & Negreiros, 2013).

Finally, we consider that assessment and monitoring drug addiction treatment can be useful to find variables of success and unsuccessful of treatment programs and to identify an adequate organizational functioning of the several treatment settings. Consequently, these data may help to identify areas in which is urgent a rectification or a change of treatment programs (Simpson & Flynn, 2007).

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DEVELOPMENTAL APPROACH TO THE STERNBERG'S TRIANGULAR THEORY OF LOVE – TRILAYERS LOVE[*]

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Abstract

Love is a hardly definable and multifaceted feeling. Currently the most popular and comprehensive approach to this feeling is Sternberg's Triangular Theory of Love, according to which love can be understood as comprising three components: intimacy, passion and commitment.

The most important objective of this presentation is the description of the developmental approach to the Sternberg's Theory which introduces love as a three layer phenomenon. This approach enables the adoption of the developmental perspective to understand the experience of love. Assuming that the development of an individual proceeds from biological to social being, the presentation describes biological, psychological and socio-cultural factors that can influence the three aspects of love – from passion through intimacy to commitment. The metaphor of layers helps to understand the difficulties in forming intimate relationships and the possibility of formation of dysfunctional, disordered love aspects. Unhealthy love is one that is too strong or too weak and which makes the exploration of reality or the duration of a satisfactory relationship impossible.

Another aim of this presentation is to describe love scales with the own one that measures an unhealthy love. Based on the Sternberg's Scale, items to study the dysfunctional aspects of the relationship were created, items that measure too strong and too weak level of each of love aspects. The scales are internally consistent, with a median Cronbach alpha coefficient around 0.80, depending on the dysfunctional love factor scale.

Currently, research are conducting to measure the impact of many various personal factors like temperament, attachment style, ego strength on the healthy and unhealthy aspects of love and their influence on relationship satisfaction. These study shows that there is a relation between personal factor and love and that love can disturb balance of relation-exploration.

Keywords: Love, Passion, Intimacy, Commitment.

1. The phenomenon of love in Sternberg's Triangular Theory

Currently the most popular and comprehensive approach to love phenomenon is Sternberg's Triangular Theory of Love (1986), according to which love can be understood as comprising three components: intimacy, passion, and commitment. Passion according to Sternberg is a derivative of motivational involvement in the relationship. It includes such elements as: desire for connection, romantic and sexual drives or physical attraction. Intimacy components refer to warm feelings of closeness, bondedness, mutual understanding, and satisfactory communication. The last component commitment consists of two facets - short-term intention to love and long-term intention to maintain commitment to the beloved. According to Sternberg these three components of love alone or in combine form eight possible types of love, for example, liking is intimacy alone or companionate love is intimacy with commitment but without passion. This theory describes also how levels of this three factors change in

the relationship under the influence of time. Sternberg grounds this theory psychometrically and empirically (Sternberg, 1997). Studies also show that this theory reflects feelings of the people about loving relationship (Aron & Westbay, 1996). This theory omits personal factors that can influence the lever of this components and the ability to love (Wojciszke, 2010).

2. Personal factors and love

Results of studies show that this three love factors have different biological basis (Fisher, 1994). There is a strong connection between passion and dopamine - hormone related to positive emotions and brain reward system. Intimacy probably is associated with oxytocin, which is associated with a feeling of trust and attachment, whereas commitment based on cerebral cortex processes. Other researchers point out that Triangular Theory of Love ontologically presuppose a neoclassical structure of the psyche (Diessner, Frost & Smith, 2004). The neoclassical psyche consists of three fundamental and irreducible capacities: cognition, affect and conation, which, according to these researchers, implied in love factors - commitment is derived from conation, passion component is derived from conation and intimacy is derived from emotional processes. There are also some studies that show correlations between personal factors and love components (Engel, Olson & Patrick, 2001; Scott & Lindsey, 2009). The above considerations prove the importance of subjective factors for love and for the ability to establish and maintain the relationship based on love.

3. Developmental approach

Under the assuming that personal factors are important for loving relationship and that the development of an individual proceeds from biological to social being, it is possible to propose the developmental approach to the Sternberg's theory (Olesiński, 2013). This approach introduces love as a trilayer phenomenon. Three layered love shows that biological, psychological and sociocultural factors influence the three aspect of love - biological ones are more related to passion (cf. Buss, 1995). Psychological factors have more influence on intimacy and sociocultural factors create ways of engaging in a relationship. Temperament is reflected in the experience of passion; different experiences, especially these from early childhood, influence the experience of intimacy; norms and social values create a way of shaping involvement. The metaphor of layers helps also to understand the difficulties in forming intimate relationships.

4. Dysfunctional love

It is difficult to tell when the loving relationship can be considered healthy, functional or non-functional, unhealthy. It is possible to distinguish different evaluation criteria e.g. duration, fidelity, subjective satisfaction of partners or development of relation including for example having children. They seem to be not fully sufficient or insufficient to describe all types of relationships. The developmental approach aims to present not only determinants of the ability to love but also the possibility of formation of dysfunctional, disordered love aspects. Unhealthy love in three layers love is one that is too strong or too weak and which makes impossible the exploration of reality or the duration of the satisfactory relationship. Various kinds of subjective factors which determine the ability to build relationships based on love may also cause that passion, intimacy and commitment are unhealthy. In Sternberg's theory love factors are always normative, in developmental approach levels of each love layer can cause exploration-relational imbalance.

5. Measuring of dysfunctional love

Based on the Sternberg's Scale items to study the dysfunctional aspects of the relationship were created. For example, items that measure commitment in Sternberg's Love Scale are: "I know that I care about ___", "I view my commitment to ___ as a solid one, "I feel a sense of responsibility toward ___", based on them added items that measure too high level of commitment are: "I can give up all my desires for my relationship with___", "I will do literally everything to maintain my relationship with ___", "Because of my involvement in the relationship with ___ I do not let other people be too close to us", and also added items that measure too weak level of commitment like: "It's hard to say how long I wanted to be in a relationship with ___", "I cannot sacrifice my needs for a relationship with ___".

In the same way were created items that measure too strong and too weak passion and too strong and too weak intimacy. Items were evaluated by competent judges, and, after that, created the final number of items - 10 for each of the unhealthy love scales. The scales were tested by 60 university students currently involved in a close relationship with someone of the opposite sex. Respondents rated their own love-related thoughts, feeling, behaviors toward their partners on a scale ranging, like in Sternberg's Scale from 1 "strongly disagree to 9 "strongly agree". The scales are internally consistent, with a median Cronbach alpha coefficient around 0.80, depending on the dysfunctional love factor scale. Currently, researches are conducting to measure the impact of various personal factors like temperament, attachment style, ego strength on the healthy and unhealthy aspects of love and their influence on relationship satisfaction.

6. Dysfunctional love and personal factor

One of the examples presented by the study is a relation between attachment style and too weak and too strong relational commitment. Sixty students currently involved in loving relationship were tested with Dysfunctional Commitment Scale, State Adult Attachment Measure (2009), and Relationship Assessment Scale (1988) . SAAM comprises three subscales, each of which comprises seven items. The first subscale represents state security - a typical item is "I feel like others care about me". The second subscale represents state anxiety - an example of an item is "I want to share my feelings with someone". Finally, the third subscale refers to state avoidance – typical item is "If someone tried to get close to me, I would try to keep my distance". RAS is a 7-item scale designed to measure general relationship satisfaction. The results revealed the correlation between state avoidance and too weak commitment (r = 0,357, p < 0,005) and between anxiety state and too strong commitment (r = 0,530, p < 0,001). There was no correlation between state security and unhealthy commitment. The results revealed also a negative correlation between too weak commitment and relationship satisfaction (r = -0,659, p < 0,001) and a positive correlation between too strong commitment and relationship satisfaction (r = 0,447, p < 0,001). These study show that there is a relation between personal factor and love and that love can disturb balance of relation-exploration.

7. Discussion

Love is one of the most important human phenomena and one of the more elusive psychological constructs. Exploration of this issue seems relevant in terms of cultural changes - for example in the definition of the family and in the definition of the intimate relationship. One of the most comprehensive theories of love - Sternberg's Triangular Theory includes only the intensity of the desired elements of an intimate relationship and omits influence of personal factor on this phenomena. For this reason proposed developmental approach of Sternberg's Theory which emphasizes the

importance of the individual ability to experience love. This three layer love takes into account the impact of mental processes not only on the existence and intensity of passion, intimacy and commitment, but also on dysfunctional relationship level. This approach allows to obtain knowledge of dysfunctional relationship's aspects and its individual determinants. Current and future analysis of subjective variables that may affect functional and dysfunctional intimate relationship aspects allows a comparison of the influence of various subjective variables determined by biology, childhood experiences, and by experience of later years. Acquired knowledge of the importance of subjective factors that determine functional and dysfunctional aspects of intimate relationships allow its practical use in psychotherapy and psychological training.

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PATHOLOGICAL GAMBLING AND ANTISOCIAL PERSONALITY DISORDER IN INDIVIDUALS WITH METHAMPHETAMINE DEPENDENCE

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Abstract

Background: Gambling disorder, previously known as pathological gambling (PG), is the only behavioural addiction included in the revised *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*, American Psychiatric Association, 2013) chapter on *Substance-Related and Addictive Disorders*. Not only is PG often comorbid with substance use disorder, but the two disorders are also more common in individuals with impulsive personality including individuals with antisocial personality disorder (ASPD). This research investigated the association between PG and ASPD and to identify risk factors for the traits in a Thai methamphetamine-dependent sample.
Methods: Demographic and diagnostic data (based on *DSM-IV*; American Psychiatric Association, 1994) were obtained from 728 methamphetamine-dependent individuals using the Semi-Structured Assessment for Drug Dependence and Alcoholism (SSADDA), as part of an ongoing study of the genetics of methamphetamine-induced psychosis in a Thai substance dependence treatment cohort. Associations between PG and ASPD were analyzed using the chi-square test. Risk factors for PG and ASPD were identified by logistic regression analysis.
Results: The comorbidity of PG and ASPD with methamphetamine dependence was high (33.4% and 23.8% respectively). Individuals with ASPD were more likely to have PG than those without (49% vs. 29%; $\chi^2_1 = 25$, $p < 0.001$). The only demographic variable associated with PG and ASPD was male sex (PG: OR = 1.4, $p = 0.05$; ASPD: OR = 2.5, $p < 0.001$). Youth (age < 20 years) predicted a diagnosis of ASPD (OR = 3.1, $p < 0.001$). In addition, a host of substance dependence variables were associated with both PG and ASPD, including severe methamphetamine dependence (PG: OR = 2.2, $p = 0.001$; ASPD: OR = 1.8, $p = 0.04$), nicotine dependence (PG: OR = 1.8, $p = 0.002$; ASPD: OR = 1.6, $p = 0.04$), and alcohol dependence (PG: OR = 1.5, $p = 0.02$; ASPD: OR = 1.7, $p = 0.007$). Cannabis use was associated with PG (OR = 1.6, $p < 0.001$), opiate use (OR = 2.1, $p = 0.002$) and occurrence of methamphetamine-induced paranoia (OR = 1.7, $p = 0.009$).
Conclusions: Risk factors common to PG and ASPD were gender, substance dependence and severity of substance dependence. ASPD but not PG was associated with neuropsychiatric disorders. In methamphetamine-dependent individuals age was a predictor for a diagnosis of ASPD suggesting pathophysiological differences in the basis of substance dependence in different age groups.

Keywords: Gambling, Antisocial personality, Methamphetamine.

1. Introduction

Gambling disorder, previously known as pathological gambling (PG), is the only behavioural addiction included in the revised *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*, American Psychiatric Association, 2013) chapter on *Substance-Related and Addictive Disorders* (American Psychiatric Association, 2013). Seventy per cent of Western populations gamble annually (Sproston, Erens, & Orford, 2000) and it is estimated that 1-4% have PG (Shaffer, Hall, & Vander Bilt, 1999). A study in Thailand found a prevalence of 7.5% for PG among employees in a hospital (Pongsasithorn, 1999). In PG gambling behaviour is reinforced by excitement-seeking and the expectation of monetary gain (Pantalon, Maciejewski, Desai, & Potenza, 2008, Clark, Lawrence, Astley-Jones, & Gray, 2009) in spite of its harmful consequences. Previous studies showed that reward sensitivity, clinical features, physiology, brain

activity, comorbidity and treatment are similar for drug addiction and behavioural addiction (Wareham, & Potenza, 2010). PG is less prevalent in the general population than in drug users, it has been reported that about 25% of Thai methamphetamine users have PG (Amornruksa, 2005 whereas about 12.4% of Thai substance-dependent individuals have PG (Pongsasithorn, 1999).

PG behaviours have a compulsive aspect and PG was previously categorized as a disorder of impulse control in *DSM-IV-TR* (American Psychiatric Association, 2000) before being classified as a behavioural addiction in *DSM-5*. Not only is PG often comorbid with substance use disorder, the two disorders also commonly occur in individuals with impulsive personality including individuals with antisocial personality disorder (ASPD), a pervasive pattern of impairments in self-regulation and social conformity. Interestingly, up to 65% of substance-dependent individuals have a diagnosis of ASPD (Ross, Glaser, & Germanson, 1988) and previous studies have reported that antisocial behaviours are likely to be present in individuals with PG; however the association between PG and ASPD in substance users has not been explored. We therefore investigated the association between PG and ASPD to identify risk factors for these disorders in a methamphetamine-dependent sample.

2. Design

A retrospective, cross-sectional, descriptive study

3. Objectives

The aims of this research were 1) to investigate the association between PG and ASPD and 2) to identify common risk factors for PG and ASPD.

4. Methods

Demographic and diagnostic variables (based on *DSM-IV*, American Psychiatric Association, 1994) were obtained from 728 methamphetamine-dependent individuals aged 18 years or older using the Semi-Structured Assessment for Drug Dependence and Alcoholism (SSADDA), as part of an ongoing study of the genetics of methamphetamine-induced psychosis in a Thai substance dependence treatment cohort. Participants were hospitalized as part of a four-month methamphetamine rehabilitation programme at Thanyarak Institute between 2007 and 2011. The exclusion criteria were 1) primary psychotic disorder such as schizophrenia and 2) neurological diseases such as cerebrovascular stroke, epilepsy and dementia. The study protocol was approved by the Ethical Committee, Faculty of Medicine, Chulalongkorn University (med Chula IRB). SSADDA–Thai version (Malison et al., 2011) is a comprehensive interview based on *DSM-IV* that can be used to diagnose substance dependence (i.e. methamphetamine, nicotine, alcohol, opiate, solvent, cannabis) and psychiatric disorders (i.e. major depressive episode, suicide risk, anxiety disorders, ASPD, PG).

Associations between PG and ASPD were analyzed using chi-square tests. Risk factors for PG and ASPD were identified by logistic regression analysis.

5. Results

Of 728 methamphetamine-dependent individuals, 243 (33.4%) had PG and 173 (23.8%) had ASPD. ASPD was associated with PG, individuals with ASPD were more likely to have PG than individuals without (49% vs. 29%; $\chi^2_1 = 25$, $p < 0.001$).

Being male, suicidal ideation, methamphetamine-induced paranoia, severe methamphetamine dependence, nicotine dependence, alcohol dependence, opiate dependence, inhalant use and cannabis use were all associated with PG ($p < 0.05$). Logistic regression analysis showed that being male (OR = 1.4, $p = 0.05$), severe

methamphetamine dependence (OR = 2.2, *p* = 0.001), nicotine dependence (OR = 1.8, *p* = 0.002), alcohol dependence (OR = 1.5, *p* = 0.02) and cannabis use (OR = 1.6, *p* < 0.001) increased the risk of PG.

In addition, being male, younger, suicidal ideation or a suicide attempt, methamphetamine-induced paranoia, severe methamphetamine dependence, nicotine dependence, alcohol dependence, opiate use, inhalant use and cannabis use were associated with ASPD (*p* < 0.05). Logistic regression analysis showed that being male (OR = 2.5, *p* < 0.001), age < 20 years (OR = 3.1, *p* < 0.001), methamphetamine-induced paranoia (OR = 1.7, *p* = 0.009), severe methamphetamine dependence (OR = 1.8, *p* = 0.04), nicotine dependence (OR = 1.6, *p* = 0.04), alcohol dependence (OR = 1.7, *p* = 0.007) and opiate use (OR = 2.1, *p* = 0.002) predicted ASPD.

Table 1. Demographics, diagnostic, and substance variables of methamphetamine-dependent individuals with and without PG and those with and without ASPD

	PG (n=243)		Non-PG (n=485)		p-values	ASPD (n=173)		Non-ASPD (n=555)		p-values
	n	%	n	%		n	%	n	%	
Male	131	53.9	210	43.3	0.007	113	65.3	228	41.1	<0.001
Age										
<20	37	15.2	70	14.4	0.96	40	23.1	67	12.1	0.002
20-29	130	53.5	262	54.1		85	49.2	307	55.3	
≥30	76	31.3	153	31.5		48	27.7	181	32.6	
Religion attendance	220	90.5	435	89.7	0.72	149	86.1	506	91.2	0.05
Major depression	3	1.2	3	0.6	0.41	1	0.6	5	0.9	1.00
Suicidal ideation	114	46.9	172	35.5	0.003	83	48.0	203	36.6	0.008
Suicidal attempt	53	21.8	97	20.0	0.63	46	26.6	104	18.8	0.03
Meth-induced paranoia	117	48.1	172	35.5	0.001	96	55.5	193	34.8	<0.001
Severe meth dependence	218	89.7	363	74.8	<0.001	155	89.6	426	76.8	<0.001
Nicotine dependence	191	78.6	288	59.4	<0.001	139	80.3	340	61.3	<0.001
Alcohol dependence	94	38.7	110	22.7	<0.001	76	43.9	128	23.1	<0.001
Opiate use	59	24.3	68	14.0	0.001	52	30.2	75	13.5	<0.001
Solvent use	77	31.7	109	22.5	0.007	64	37.0	122	22.0	<0.001
Cannabis use	196	80.7	315	64.9	<0.001	145	83.8	366	65.9	<0.001

6. Discussion

There was high comorbidity among PG, ASPD and methamphetamine dependence. Being male was the only demographic variable associated with PG and ASPD, youth (age < 20 years) was a predictor of a diagnosis of ASPD. A host of substance dependence variables were associated with both PG and ASPD, including severe methamphetamine dependence, nicotine dependence and alcohol dependence. Cannabis use was associated with PG, whereas opiate use and the occurrence of methamphetamine-induced paranoia were associated with ASPD.

PG was associated with substance use dependence, which is consistent with a previous study (Pongsasithorn, 1999). The prevalence of PG in this substance-dependent sample was higher than in the general population. For example, problem gambling or PG is reported at rates of 0.5-3% for the general population in studies in Asia, Europe and the USA (Park et al., 2010, Wan, Wha, Lo, & Kuen, 2012); PG prevalence of 12% was reported for adolescents from North America (Pietrzak, & Petry, 2006) and PG was found in 17–60% of individuals with substance use disorders (Kausch, 2003; Petry, Stinson, & Grant, 2005). PG has much in common with the addictive disorders, which are characterised by 'disinhibition' (Slutske, Caspi, Moffitt, & Poulton, 2005); this supports the inclusion of PG in the same diagnostic category as substance dependence in *DSM-5*. Being male was a predictor of PG, consistent with previous reports (Pongsasithorn, 1999; Amornruksa, 2005). The sex difference may result from the fact that men are more likely to engage in impulsive behaviours than women especially in adolescence or if they are substance-dependent (Vitaro, Arseneault, & Tremblay, 1997).

Prevalence of ASPD in this substance-dependent sample was high compared to the general population (Petry et al., 2005; Samuels, Eaton, Bienvenu, Brown, Costa,

& Nestadt, 2002), but comparable to prevalence in prison populations (Black, Gunter, Loveless, Allen, & Sieleni, 2010) and other substance-dependent populations (Lenzenweger, Lane, Loranger, & Kessler, 2007; Goldstein et al., 2007). As for PG, being male was a predictor of ASPD, consistent with previous reports (Samuels et al., 2002; Grella, Karno, Warda, Niv, Moore, 2009). Interestingly, the low activity form of the monoamine oxidase-A gene (*MAOA-L*), a gene located on the X chromosome, has been associated with antisocial behaviour in men (Eme, 2013). Youth was a predictor of ASPD in this sample. ASPD is a persistent disorder according to the SSADDA, therefore age should not be a factor in diagnosis. We speculate that this outcome might be due to differences between the different age groups in our substance-dependent sample. Different age groups in this population should be considered separately.

Individuals with ASPD had a high prevalence of mood disorders and psychotic disorders. Our finding that suicidal ideation or suicide attempts and secondary paranoia were associated with ASPD is consistent with previous research. A study from Mexico found that depressed mood was associated with antisocial behaviour and that negative mood increased the risk of suicidal thought or a suicide attempt (Roth, Borges, Medina-Mora, Orozco, Oueda, & Wilcox, 2011). In a sample overlapping with that used in this study we found that a psychotic trait, was associated with ASPD and suicide attempts (Kalayasiri, Mutirangura, Verachai, Gelernter, & Malison, 2009), which is consistent with a previous study (Sulaiman et al., 2014).

PG and ASPD were highly correlated, consistent with previous studies (Sáez-Abad, & Bertolín-Guillén, 2008). The correlations among PG, ASPD and substance dependence supports the hypothesis that impulsivity, a characteristics which is commonly found in all three disorders, might be the common factor in these disorders.

7. Conclusions

Risk factors common to PG and ASPD were male sex, substance dependence and severe substance dependence. ASPD was more strongly associated with neuropsychiatric disorders. Age was a predictor for a diagnosis of ASPD in methamphetamine-dependent individuals suggesting pathophysiological differences in the basis of substance dependence in different age groups.

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ECOLOGICAL ANDA CONTEXTUAL INTERVENTIONS IN BEHAVIORAL REHABILITATION OF A CHILD WITH CEREBRAL PALSY

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Abstract

This study aims to propose an intervention program based on the context to behavioral problems of a child with cerebral palsy. The study is related to the interventions developed during the year of 2013 in a specific group of SARAH Network of Neurorehabilitation Hospitals, the Fifth Dimension. It is based on contextual approach, taking the contributions of Urie Bronfenbrenner, Mark Ylvisaker & Timothy Feeney, and Lucia Braga. The case report is a type of scientific presentation that enable an important source of information about interventions made with specific populations. In clinical practice with children that present cerebral palsy the evidence relating cerebral injury and behavioral problems is recent. However common problems include conduct disorder, emotional disorder and higher frequency of hyperactivity. In this study behavioral problems are understood as deficits or behavioral excess that inhibit new reinforcement contingencies and difficult new behaviors that are important to the learning process. The Fifth Dimension program is an educational system in which social interaction is a means for generalizing information and a basis for the development of skills. It was originally created in Laboratory for Comparative Human Cognition at University of California by Michael Cole. In 2006, the program was adapted to the rehabilitation context in Brazil and developed by SARAH Network of Neurorehabilitation integrating the activities to children with cerebral palsy. In this research, the subject, a six year-old child, before integrating the program presented agitate behavior, impulsivity, lack of behavioral regulation and deficits in social skills. It was promoted interventions through playful activities that possibilitated functional analysis about behavioral problems, antecedent management to modify behaviors, alternative behavioral models through peers interactions; behavioral self-regulation and adjustment in parental and social management. The results indicate improvement in social skills; reduction in frequency and intensity of behavioral problems and development in family and social participation.

Keywords: Behavioral problems, Cerebral palsy, Contextual interventions, Infancy.

1. Introduction

This study aims to present a case report that represents possible interventions with a child with cerebral palsy and behavioral problems. It is comprehended that behavioral problems represent an important parental concern and it can be a variable that interferes in different areas of child´s life and implicates in global functioning. For this reasons, interventions related to behavioral rehabilitation are extremely important as a possibility to improve children and family quality of life. In this study will be described the interventions developed to a child in treatment in a specific program in SARAH Network Neurorrehabilitation and the results of this program.

2. Brain injury, behavioral problems and intervention models

Brain injury in infancy can be classified as congenital or acquired. The congenital injuries occur at prenatal or perinatal period and acquired injuries occur at later phases of development. It is used the term cerebral palsy to designate a disorder related to movement disturbance caused by a nonprogressive brain injury. In other side, traumatic brain injury refers to an acquired brain injury in later phases of development. According to Duran & Goodman (2000), conclusive evidence about the relation between brain injury and behavioral problems is recent. These authors assume that children with brain injury present more probability to develop psychiatric problems

independently of others factors. In other study, Feeney & Ylvisaker (2008) consider that behavioral and social problems are common in children that present developmental disturbance or after a traumatic brain injury.

According to Forman (2008), brain injury and its consequences implicate in fundamental changes in family. For this reason it is justified therapeutic proposals that can attenuate these problems or helping to increase coping behaviors relate to them. In this study, behavioral problems are understand as behavioral deficits or excess that difficult the access of the child to new reinforcement contingencies that are important to the learning process, according to Bolsoni-Silva & Del Prette (2003). Common problems in children with brain injury include disinhibition, aggressive behavior, immaturity, inflexibility, depression, social retreat, hyperactivity, oppositionism (FEENEY & YLVISAKER, 2006). These behaviors are multidetermined. There are organic, environmental, cultural variables that interfere in the process of determinate and maintain behaviors. Functional analysis is a possibility of considering the major number of variables as possible to delineate intervention programs.

Literature review demonstrates an expressive quantitative of intervention programs to children with brain injury. However, as considered by Braga and cols. (2010), the intervention procedures direct to specific deficits are well successful just in specific targets and fail in generalization. An alternative perspective to traditional intervention to develop skills in children with brain injury demonstrates more effectiveness and develops intervention in context or offers activities of particular interest and importance to subjects that need of them (BRAGA and cols., 2010; FEENEY & YLVISAKER, 2006).

The contextual approach in developmental studies privileges the analysis and interventions in natural environments and considers diversity in subject development (ALVES, 1997; BRONFENBRENNER, 2011). Contextual and environmental rehabilitation promote interventions in subject context and objective more effectiveness about the learned skills and how they are maintained over time.

Feeney & Ylvisaker (2008), analyzing interventions for children with brain injury, consider that the interventions based on child everyday life and contextualized training of social skills appear as an effective alternative in work with children with brain injury and developmental delay.

3. SARAH Network of Neurorrehabilitation and Fifth Dimension: social interaction and development

SARAH Network of Neurorreabilitation is reference in Brazil about treatment of neurological problems in children and adults. The network consists in nine units and receives patients from all over the country. In infancy most of population presents the diagnosis of cerebral palsy or traumatic brain injury. Children and teenagers are attended through different modalities of treatment by an interdisciplinary health team (BRAGA and cols., 2010). The Fifth Dimension program is comprehended as an educational system in which social interaction is mean to generalize informations and basis to skills development. It was originally developed in University of California by professor Michael Cole. In 2006, the program was adapted to rehabilitation context and initiated in SARAH Network of Neurorreabilition. The program is developed with the participation of psychology and pedagogy students that stimulate educational and ludic activities with children in a collaborative learning process.

4. Case report SFA: ecological and contextual interventions in behavioral rehabilitation of a child of cerebral palsy

4.1. SFA - description
This case report refers to a period of intervention with a child that presents the diagnosis of cerebral palsy and behavioral problems. In this study in order to preserve identity the child will be named as SFA. Nowadays the child is seven years old and

presents the diagnosis of cerebral palsy, right hemiplegia. SFA maintains treatment in SARAH Network, São Luís unit, since February, 2008.

Longitudinally, SFA participates of treatment program with goals related to stimulation of global development, evaluation and intervention to behavior area and support to learning process in school. The child treatment occurs with her parents and sister. In this case report will be presented the interventions that were accomplished during the year of 2013, in a specific rehabilitation group.

In the beginning of interventions, functional analysis with family, school and heath team demonstrated behavioral problems interfering in family, school and social context. It was observed the following characteristics: agitation and impulsive behaviors, lack of behavioral regulation, specially before new activities and environments in which SFA presents disruptive behaviors, poor social skills (deficits related to assertiveness and social resourcefulness), and problems with organization and planning routine tasks.

Positive aspects of evaluation that illustrate potential and interest areas of SFA appear in activities relates to symbolic thought, artistic creation, use of electronic means as computer and games. Through these areas it was observed a possibility of more effective intervention and reduction on frequency of behavioral deficits. Through those activities it was also easier to introduce to SFA alternative behavioral models in order to deal with environment situations more challenging. The primordial areas of interests presented by SFA would guide the rehabilitation based on context[*]. In this phase, parental strategies to behavioral management were based on consequent control of behavior, excess of verbal command, verbal reprehension and an intermittent schema of reinforcement to the positive behaviors of SFA.

In the beginning of 2013, the child was submitted to a more systematic evaluation of cognition and neuropsychological development. Quantitative data about cognition pointed to average performance, according to RAVEN test – RAVEN´s progressive matrices. There were identified problems in behavioral regulation, attention skills, executive functioning and pedagogical development. Behavioral analysis didn´t suggest a global disorder. However, significant clinical problems appeared in areas related to disruptive behavior, anxiety, and autistic behaviors. Attentional deficit also appeared in child´s evaluation. These impressions were developed considering application of the Developmental Behavior Checklist for parents (DBCP) and a questionnaire to register behaviors of lack of attention, agitation and hyperactivity (SNAP-IV). SFA also presented problems in executive functioning that include planning skills, organization, initiative and behavioral control. The application of Behavior Rating Inventory of Executive Functioning (BRIEF) and the qualitative evaluation pointed to a global deficit of these functions and a more expressive difficult related to inhibition, shift, working memory and behavioral regulating. The Test of Everyday Attention (TEA) pointed to attention deficit, specially, to verbal attention and divided attention. It was identified difficult in inhibitory control of behavior.

4.2. Interventions and results

In the year of 2013, SFA was included in Fifth Dimension Program. The child participated of stimulation activities with psychology and pedagogy students, twice a week, with the supervision of an interdisciplinary health team composed by one psychologist, two pedagogues, one physiotherapist, and one physical education teacher. During activities, SFA participated of playful activities with peers that were defined according to their interest and in a collaborative perspective with the student that compose the peer in interaction. In this way, SFA and student´s choices were related to artistic creation activities, electronic games, board games, children´s movies, sportive activities, symbolic activities, planning of celebrations, cooking and photography workshops. Parents interacted with child and students during coffee-

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[*] More information available in Braga and cols., 2010.

breaks and they participated of a support group in which received information about developed activities and could share experiences with other families about children development and rehabilitation.

At the end of each day of interaction with SFA and other children students received orientation and support by health team. They received support about theoretical basis of Fifth Dimension program and discussed mediation strategies to SFA and other children, considering their interests and aspects of their development.

In the beginning of intervention it was introduced and organizer planned and used in cooperation between child and student in order to improve planning skills and execution during activities. Besides it was considered that this tool allowed elaboration of agreements with child and behavioral scripts to solve problems inside the group. Observation of following interactions pointed to effectiveness in this strategy. However group activities and cooperation between SFA and other children continued to be challenge and initiate avoidance and disruptive behaviors. Negotiation during activities was successful in peers but difficult in group arrangements.

The necessity of organization inside the group appeared as a possible intervention with SFA. In the project councils were promoted as a tool to elaborate agreements and taking decision process in which each child and student were implicated. Inside the group it was initiated a gradual approximation of SFA to these moments, containing on student support and support of other child who can participate more easily. Alternative models of social behavior were spontaneously exposed to SFA who could increase her skills. Besides it was a mean to stimulate metacognitive skills and encourage child´s thinking about its own behaviors in this context.

At the end of first semester it was identified that SFA acquired familiarity in the use of tasks organizer and developed facility to use specific behavioral scripts and reduce need for student´s verbal clues during activities. At this time, group activities and interaction with other children still were an intervention goal to SFA. These activities initiated aggressive verbal behavior as related by parents. Thereafter interactions between SFA, students and other children enable a more specific functional analysis about behavioral problems in a way to identify environment variables related to frequency, intensity and management of them.

Discussion moments with students, direct observation and systematic registers enable the health team comprehend that aggressive behaviors with peers were related to situation in which SFA didn´t want to participate or would like to propose changes. It was discussed mediation strategies with students to promote alternative models of behavior for the child to express unpleasantness in a social competent manner. In the second semester it was possible to register alternative behaviors presented by SFA.

Another intervention refers to mediation about direct interactions between SFA and other children. New environments arrangements were experienced with trios. In these moments students stimulate metacognitive skills about SFA´s behaviors direct to peers. In other situations, extremely interesting activities to SFA were experienced in other child company. Behaviors as asking help, praising and apologizing were experienced into the group interactions with support and social mediation.

SFA´s parents participated in rehabilitation program and informed about improvements observed in other contexts. At the end of 2013, they described reducing on frequency of disruptive behaviors in social situations. They also started to incorporate different strategies to management at home as the use of organizer and behaviors scripts and stimulating a more active participation of SFA in social events. SFA started to discriminate occasions to the use of strategies.

Current function analysis pointed to improvement in cognition, parental stimulation and functioning at school. Parents observed gains related to autonomy, social skills and execution of daily activities. Attentional aspects have been accompanied through environment organization at school, stimulating activities at home, mediation strategies. In revaluation process after those interventions it was verified no data suggesting a global behavioral problem. However significant clinical

problems appear in communicative area and anxiety area. The problems relate to communication were not observed at the first evaluation and correspond to parents report about SFA´s interactions with other people.

According to the scale of evaluation it is observed remission in problems of disruptive behavior and autistic behaviors that were observed at the first application. It is also observed reduction on frequency of attention deficit, agitation and hyperactivity. Evaluation parameters will be continuously accompanied.

The revaluation of executive functioning didn´t point to deficits areas. At the first application data suggested a global deficit in this area and specific problems related to inhibition, shift, working memory and behavioral regulation. This inventory is filled with parents answers and it is necessary consider a positive inclination of them to evaluate intervention. However data are compatible with health team impressions and will be accompanied as well. In attention area it is still observed attentional deficit, specially, to verbal and divided attention. It is observed improvement in inhibition control of behavior in reapplication of the scale. Revaluation data through functional analysis and reapplication of scales point to gains after an initial intervention. Future goals include longitudinal accompaniment in order to evaluating maintenance process and indicate the need of additional interventions.

5. Conclusions

Rehabilitation process does not implicate in linearity. New demands appear in different phases of development and interventions may need review. However the differential to the context in which effective interventions were made is related to the possibility that gains sustain a basis to coming demands.

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A TRANSPERSONAL PERSPECTIVE ON THE WORK ON NARCISSISM IN CLINICAL AND EDUCATIONAL CONTEXTS

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Abstract

Among the skills that a psychotherapist, and any operator "psy" at large, should have is the ability to refrain from projecting his or her own unconscious contents or motives on the patient or the person whom he or she is facilitating.

Among the contents that one tends to project outwards, the narcissistic ones are preponderant, which refer to nuclei of the self where one's resistances are still very strong and difficult to break up.

Working on one's own narcissism is an ethical imperative for any professional involved in helping relationships, especially in the clinical context and in education. The lack of the archetypal father, which is the mark of wisdom and discrimination, is one of the main factors that afflict mankind today. The qualities of wisdom and discrimination are almost absent in our highly materialistic and narcissistic society. Materialism and narcissism are, in fact, two sides of same coin.

In the integral model of Transpersonal Psychology, whose leading theorist is Ken Wilber, the American researcher of consciousness, and whose greatest representative in Italy is Laura Boggio Gilot, narcissism can be considered at various levels of severity and differentiation, corresponding to different levels of development or stages of consciousness. Narcissism has obviously clinical interest as a pathology, but is far more important for its consequences on human health when it manifests in the so-called psychopathology of normality, the often concealed pathology identified and studied by Abraham Maslow.

According to the integral approach, overcoming narcissism means also evolve in consciousness. The integral model, when correctly applied, can provide practical help to those who want to evolve in consciousness, overcoming the narcissistic factors, which are rooted in pride and greed, evils that have always been highlighted in all authentic spiritual traditions.

By uniting psychology and spirituality, the transpersonal model aims to contribute in creating a more conscious, ethical and communal humankind.

Keywords: Narcissism, Transpersonal, Integral, Education.

Among the skills that a psychotherapist, and any operator "psy" at large should have, there is the ability to refrain from projecting his or her own unconscious contents or motives on the patient or the person whom he or she is facilitating.

The projection of one's own psychological contents makes the facilitated person feel confused and prone to adhere to the therapist's worldview, then making him dependent. The issue of countertransference has been debated at length about the consequences it can have on therapy itself and on the prospective therapeutic relationships a person could have, not to mention the effects on the image of psychotherapy as a profession.

A certain amount of projection can be considered normal, and it is hardly avoidable. Indeed, we get acquainted with the outer reality only by projecting on it something we already know. In some way, those contents belong to us. The problem arises when we are totally unaware of them. Every clinician is expected to be aware of them, in order not to act them out.

The unaware countertransference is of paramount importance even in the educational context, where it causes misunderstanding between teacher and student,

especially in those contexts in which students depend considerably on the idealization of their teacher's personality. The consequent disillusion can affect their future emotional stability, because they may feel they have not been affectively contained by an unbiased, influential figure, who has to exercise a generative role, in which the up-down position is tacitly accepted and favored. The student needs this position, because he has yet to consolidate his psychological space.

Among the contents that one tends to project outwards, the narcissistic ones are preponderant, which refer to *nuclei* of the self where one's resistances are still very strong and difficult to break up.

Working on one's own narcissism is then an ethical imperative for any professional involved in helping relationships, especially in the clinical context and in education, whereas the frailty of the person is embedded in being she in the "down" position. This happens with patients in psychotherapy and in students in developmental age.

The traits of narcissism have been outlined by psychology in their different aspects. In clinical psychology, narcissism is considered as a personality disorder, where the defenses are so massive and the structure of personality so dysfunctional that the person can hardly function in her social and personal context.

In the object-relation theory, narcissism is seen as an investment of the self and the utilization of the object at the service of the self. This characterization of narcissism conveys the idea of a protection of the self.

The characteristic of narcissism as an aggrandizement of the value of the self beyond its limits has been highlighted by Karen Horney, who influenced enormously humanistic psychology. By means of this aggrandizement, the narcissist escapes from his painful feelings and nurtures the idea of being special. His self-esteem is rooted on the ideas he has about himself, which have to be confirmed from the outside. This is the reason why the narcissist needs to feel admired.

Transpersonal psychology, especially in its integral approach, whose leading theorist is Ken Wilber, the American researcher of consciousness, and whose greatest representative in Italy is Laura Boggio Gilot, maintains that the individual evolves according to stages of consciousness, depending on the emergence of the cognitive structures. Piaget has studied evolution in developmental age, whereas Wilber has extended the concept of evolution far beyond the limits of the formal operational stage.

After this latter stage, the structures of intelligence move forward till the stage of the *centaur ego*, which corresponds to the full unity of body and mind. This stage has been described by humanistic psychology, with all its characteristics, the main being authenticity. The stage of the centaur ego can be fully achieved only when the person has *de-removed* her drives and motives for the aim of self-actualization.

The stages of consciousness following the centaur ego cannot be outlined by means of the rational mind; they have been sketched by the mystics and sages of the so-called *philosophia perennis*. The term, coined by Leibniz and later used by Huxley, indicates the basis of spiritual systems and the traditional wisdom. It constitutes the spiritual core common to all religions.

In order to take into account the stages of consciousness that lie beyond the ordinary ego, it is necessary to define the Centre that rules consciousness.

The first psychologist who postulated the existence of a center of consciousness superimposed to ego was Jung, who defined it as the *Self*, which is both the center of individuality and the whole of it. Assagioli went further in defining the Self as the transpersonal center of consciousness; transpersonal meaning beyond (*trans*) personality, or ego. This Self is free from death and from any kind of suffering. No disease can affect it. It is connected with the Universal Source, the Transcendent. According to this perspective, a reflection of the transpersonal Self constantly influences the personality.

In Laura Boggio Gilot's research, narcissism is considered at various levels of severity and differentiation, corresponding to different levels of development or stages of consciousness.

The first grade (*borderline narcissism*) is characterized by the absence of super-ego and by the presence of strong destructive emotions out of control, resulting in a highly maladjusted social behavior. This level of suffering prevents the development towards the adapted ego.

At the next level (*neurotic narcissism*), the super-ego is present with strong elements of idealization and omnipotence. Social behavior is adapted, even though conflictual, and the emotions are under control. This level of suffering prevents the development towards the centaur ego.

At the third degree (*narcissism of the ego separated from the Self*), the super-ego is structured, but still adheres to beliefs, morals and values typical of the consumer society, such as prestige, wealth and success. In the context of the great spiritual traditions this kind of narcissism is expressed as *selfishness*. The factors that prevent ego from opening to the Self are unethical factors of the mind, such as: pride, greed, will to power. They foster emotional aridity, fear of death, escape in exteriority. This level of suffering prevents the development towards the ego aligned to Self.

Narcissism has obviously clinical interest as a pathology, but is far more important for its consequences on human health when it manifests in the so-called *psychopathology of normality*, the often concealed disease studied by Abraham Maslow. It derives from giving up the expression of one's own talents, true impulses and creativity. The person perceives she has betrayed herself; as a consequence, she despises herself.

Both the neurotic narcissism and the narcissism of the ego separated from the Self, outlined by Laura Boggio Gilot, can result in a psychopathology of normality, because both impede overcoming the adapted ego.

According to the integral approach, overcoming narcissism means also evolve in consciousness. Furthermore, resolving narcissism is crucial to overcoming the needless suffering, the one which is self-produced by the dysfunctional ego. In the words of Laura Boggio Gilot (2008), "Ancient wisdom, that which derives from the great meditative traditions (especially Yoga Vedanta) [...] emphasizes that, although it is true that in ordinary life a great part of human experience is related to suffering, it is also true that only to a small extent does this suffering comes from external causes. Mostly, it is instead self-produced and depends on factors that are intrinsic to the self-centered mental state, that is, on basic narcissistic afflictions of a mind that is unaware of its own potentialities and spiritual nature. It is this ontological unawareness that causes the development of the non-ethical factors and poisons that inhabit the mind and give rise to wrong and separative behaviors".

The integral model can provide practical help to those who want to evolve in consciousness and overcome the narcissistic factors, which are rooted in pride and greed, those evils that have always been highlighted by every authentic spiritual tradition. In particular, it aims to work on awareness both through therapy and meditation. Being awareness the main factor of transformation of one's own unconscious narcissistic contents, it is also the key to have access to higher states of consciousness.

The qualities of wisdom and discrimination are almost absent in our highly materialistic and narcissistic society. Materialism and narcissism are, in fact, two sides of same coin. The lack of the archetypal father, which is the mark of wisdom and discrimination, is one of the main factors that afflict mankind today, and is derived from persisting in one's own narcissism, which gives the ability to assume an attitude of observation of one's own contents, then transforming them.

By uniting psychology and spirituality, the transpersonal model aims to promote the development in consciousness and the expression of the whole human potential, that

extends far beyond the adapted ego. Therefore, it aims to contribute in creating a more conscious, ethical and communal humankind.

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ARE EMOTIONAL RESPONSES RELATED TO THE DEVELOPMENT OF INTRUSIONS IN A LAB ANALOGUE STUDY?

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Abstract

Lifetime prevalence of Posttraumatic stress disorder (PTSD) is estimated at 10.1% within the American population (Kessler et al, 2012). Re-experiencing of involuntary intrusive thoughts and images is one of the three symptom clusters of PTSD. Fear mechanisms, which may underlie the development of PTSD, may also lead to a dissociative state and subsequent fragmentation of the memory processes, which may be implicated in the development of intrusions. In the search for an ethically acceptable laboratory analogue of fear, reviews of mood induction procedures conclude that film-/story-based procedures are most effective; through an empathetic response we react to the plight of fictional characters as if they were real friends or enemies. However, Holmes and colleagues have argued that only representations of real-world traumatic incidents should be used to investigate intrusive re-experiencing in a laboratory setting.

The current study compared the extent to which real-world traumatic excerpts and a film excerpt targeting fear were capable of inducing intrusions, and investigated whether particular emotions would be related to the development of intrusions.

Volunteers from a university student and general public sample were randomised into film condition in a between-subjects design; 21 watched a compilation of real-world traumatic clips previously used by Holmes and colleagues, and 21 watched an excerpt from The Shining previously found to target fear. Self-report ratings of the four basic negative emotions (anger, fear, disgust and sadness) and a measure of overall arousal were completed immediately after viewing the films. Participants also completed other measures related to risk factors relevant to intrusions not reported here. Participants kept an intrusion diary over a one-week period, recording the time of day and content; diaries were returned one week later.

Of the overall sample, 45.24% (N=19) experienced intrusions over the one-week period [The Shining (N=10); the real-world traumatic clips (N=9)] with no significant difference between conditions (p=0.757). None of the correlations between self-report ratings of felt emotions and number of intrusions experienced were significant. On further examination, only six of the nine clips in the trauma compilation produced any intrusions.

Results suggest the use of fictional film clips may be as effective as real-world traumatic clips in inducing intrusions over a one-week period and are an acceptable laboratory analogue. Contrary to previous claims, felt emotions were not related to the number of intrusions experienced and the factors underlying the development of intrusions require further investigation.

Keywords: PTSD, Intrusions, Trauma, Fear, Films.

1. Introduction

Posttraumatic Stress Disorder (PTSD) may develop following the experience of trauma and lifetime prevalence is estimated at 7.8% (National US Comorbidity Survey; Kessler, Sonnega, Bromet, Hughes & Nelson, 1995). Following exposure to a stressor, usually involving actual or threatened death or harm, symptoms may arise in three clusters (DSM-IV-TR; APA, 2000). Re-experiencing is common after an adverse event and usually subsides. These symptoms can include intrusive memories in the form of flashbacks, considered by some to be a hallmark symptom of PTSD (Holmes, James, Coode-Bate & Deeprose, 2010). Characteristics of intrusions such as the feeling of

'nowness' – a sense of re-living the trauma – have been found to predict PTSD severity over a six month period (Michael, Ehlers, Halligan & Clark, 2005); however, relatively little is definitively known regarding their etiology. Since PTSD can only be diagnosed a minimum of one month post-trauma, this may afford a period in which to deliver an early intervention technique to prevent intrusive re-experiencing from occurring (Holmes et al., 2010).

Since the incorporation of PTSD in DSM-III (APA, 1980) there have been ongoing debates about where PTSD should be classified. Friedman et al (2011) have suggested that there may be two types of responses to PTSD, one involving emotionally driven, 'hyperarousal' reactions, and another involving on-going dissociation. LeDoux (1998) has highlighted fear as a core emotion in PTSD, emphasising the importance of fear mechanisms which detect danger and instigate actions in order to increase the individual's chances of survival, including the autonomic nervous system (ANS) hyperarousal responses and, via the hypothalamic-pituitary-adrenal (HPA) axis, release of cortisol. Not only may the latter ultimately be toxic to the hippocampus (Sapolsky, Uno, Rebert & Finch, 1990), but the amygdala may also inhibit the hippocampus and thus interfere with its functions of encoding events in declarative memory (Fortin, Agster & Eichenbaum, 2002).

Emotions other than fear may be associated with intrusions. Davies and Clark (1998), in an analogue study with a non-clinical sample, found change in emotion from neutral to anger in response to a film to be the strongest predictor of intrusions over a period of time. Bomyea and Amir (2012) suggest disgust, which generates avoidant behaviour as a defensive mechanism, may also be an important response in trauma. The current study therefore investigated felt emotions in response to film stimuli to consider possible associations with the development of intrusions.

Pierre Janet (1889/1973) was the first to suggest that dissociative states may also be implicated in the fragmentation of memory, hypothesising dissociation as a response to the 'vehement emotions' consequent on trauma. Dissociation may include a sense of depersonalisation, derealisation and a compartmentalisation of an experience, which is suggested to be attributable to failures to integrate mental images, thoughts, emotions and memories into consciousness. van der Kolk and Fisler (1995) suggest that peri-traumatic dissociation may be predictive of PTSD, and may cause the memory of the trauma to become stored as disorganised fragments, rather than information being integrated into autobiographical memory. This may in turn increase the likelihood of intrusive re-experiencing caused by extraneous cues relating to the trauma. These authors suggest the study of non-clinical samples in a laboratory analogue setting to further understand the development of intrusions.

Laboratory analogues allow for an ethically acceptable method of fear induction in participants. Holmes et al. (2010) developed the 'trauma film paradigm' using real-world trauma films to induce a current sense of threat, in non-clinical samples, in an order to study intrusive re-experiencing. Holmes, Crestwell and O'Connor (2007) argue that only real-world trauma clips are capable of eliciting a current sense of threat, and therefore able to induce intrusive re-experiencing. However, reviews of mood induction procedures conclude that film-/story-based narratives are most effective (Westermann, Spies, Stahl & Hesse, 1996); through an empathetic response, we react to the plight of fictional characters as if they were real friends or enemies and film viewers experience and share emotions of the fictional characters (Wied, Zillmann, & Ordman, 1995). However, observing real-world trauma, where there is no engagement with an unknown victim, may not generate this experience. The current study aimed to compare the effectiveness of a fictional film (The Shining, previously found to target fear (Gross & Levenson, 1995)) and a compilation of real-world trauma clips (Holmes et al., 2010) in generating intrusions over a one-week period post-viewing.

2. Design

A between-subjects design randomised participants to film condition: a fearful film (an edited excerpt of Stanley Kubrick's 'The Shining' (1980)), or a compilation of nine real-world trauma clips, previously found to generate intrusions due to their distressing nature (Holmes et al., 2010).

3. Objectives

The study aimed to compare intrusive responses to real-world trauma clips and an excerpt from a fearful film. Ratings of felt emotion were tested for possible relationships with the development of intrusions over the following one-week period. It was also hypothesised that vulnerability factors such as dissociative tendencies and previous trauma may be associated with the development of intrusions.

4. Methods

Participants (n=42) were recruited on an opportunistic basis; the sample consisted of 29 females (69.05%) and 13 males (30.95%), with an age range from 19 to 70 years (M=13.41, SD=31.57). Immediately after watching the film participants rated felt emotions (anger, fear, sadness, disgust and overall arousal) on a 0–10 Likert scale. Participants were then asked to complete a series of questionnaires measuring hypothesised vulnerability factors for PTSD (not reported here), and the Posttraumatic Diagnostic Scale (Foa, Cashman, Jaycox & Perry, 1997). They completed an intrusion diary as used by Holmes et al. (2010), over a one-week period, before returning for memory tests (results not reported here).

5. Results

Just under half of the participants experienced intrusions over a one-week period, 47.6% (n=10) of participants in The Shining condition; and 42.9% (n=9) of participants in the real-world clips condition (a non-significant difference). For The Shining, ratings of fear ($M=4.68, SD=2.95$) were significantly higher than the other emotions (all p<.05). In the compilation of real-world clips, either sadness or disgust was rated significantly higher than other emotions. Only six out of nine clips in the real-world trauma compilation generated any intrusions. In neither film condition were there significant correlations between number of intrusions and any of the emotion rating scores (all p > 0.05).

In both conditions, 11 of 21 participants had experienced trauma and completed the PDS. In the real-world clips condition only, there was a significant negative correlation between numbers of intrusions experienced by participants and re-experiencing symptom scores [r (11) = -0.633, p = 0.036].

Correlations between number of intrusions experienced and all other potential vulnerability factors were found to be non-significant (all p > 0.05).

6. Discussion

Contrary to Holmes et al.'s (2007) claim, both fictional and non-fictional films generated intrusions. As hypothesised, The Shining elicited greater ratings of fear than other emotions, but the real-world clips elicited either disgust or sadness. While both film conditions generated intrusions, it is not clear from this study whether the differences in emotions elicited matter as none of the ratings of felt emotion were correlated with intrusions experienced. Intrusions were only recorded over one week and recording over a longer time period might usefully consider whether they continue, and therefore may be analogues of the kind of intrusions experienced in PTSD, or

whether they are more like the common re-experiencing which subsides. Our finding that the real-world trauma clips generated fewer intrusions when real PTSD re-experiencing symptom scores were high is interesting. That the fearful film did not show this relationship suggests that there may be differences between the two types of film stimuli and this finding requires replication before implications for intrusion research are clear. Nevertheless, the use of fearful films in this kind of research would seem useful. Our results question whether the real-world trauma stimuli being used in studies does in fact emulate a real-world traumatic situation, and whether participants are in fact undergoing the same responses as those who experience trauma in the real world. If they don't, this also raises questions about the nature of intrusions reported after the study, and whether they can inform about real-world intrusive re-experiencing of trauma. As van der Kolk and Fisler (1995) state "there is little similarity between viewing a simulated car accident on a TV screen, and being the responsible driver in a car crash in which one's own children are killed".

7. Conclusion

Results suggest that fictional film clips may also be useful in investigating intrusive re-experiencing by generating empathetic emotional responses. However, contrary to previous findings, measures of felt emotions were not significantly associated with subsequent development of intrusions over a one-week period. The question of which emotions may underlie the development of intrusions remains for further study in a larger sample over a longer time frame. Our results suggest that it is possible that the real-world trauma clips (but not the fearful film) may not be effective in generating intrusions in people who have experienced real trauma and are exhibiting high scores on re-experiencing symptoms of PTSD. This is potentially interesting as these are the very symptoms the laboratory analogue studies are attempting to simulate and this finding would seem to merit further investigation.

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LONG-TERM EFFECTS OF INTERPARENTAL CONFLICT MEDIATED BY EMOTIONAL SECURITY

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Abstract

The present work analyzes the validity of a model developed to explain the long-term effects of interparental conflict experienced in childhood in both symptomatology and quality in relationships in adulthood. Emotional security in multiple family contexts is suggested as the intervening mechanism, based on the Emotional Security Theory (Davies & Cummings, 1994). Although the model does not reach the optimal level of fit to the data, relationships between variables are consistent to the hypothesis. The need of longitudinal designs and relevant assessment is posed.

Keywords: Interparental conflict, Emotional security, Adjustment.

1. Introduction

The impact of interparental conflict on children has been widely studied. Research has provided evidence of the negative impact that the destructive interparental conflict has on the adjustment during childhood and adolescence (Both & Amato, 2001; Richardson & McCabe, 2001). Efforts over the past two decades have focused on clarifying the mechanisms underlying the relationship between interparental conflict and children's adjustment (Davies & Cummings, 1994, 2006; Grych, 2005; Grych & Fincham, 1990, 1993, 2001). There are few consistent and rigorous conceptual models which have attempted to answer this question. One of programs which have received more empirical support is the Emotional Security Theory (EST) developed by Davies and Cummings (1994). This theory proposes that the emotional security in different family subsystems is a key factor when explaining emotional regulation and organization of children in the context of interparental conflict, as well as their motivation to respond (Cummings & Davies, 2010).

There are also some studies, not only cross-sectional but longitudinal, which have found that the effects of growing up in a high conflict home may last at least until early adulthood (Amato & Afifi, 2006; Amato & Sobolewski, 2001; Jekielek, 1998). The effects on sons' or daughters' own relationships, the so called intergenerational transmission of conflict, have received special attention and empirical support (Amato & Booth, 1997, 2001; Conger, Cui, Bryant & Elder, 2001). However, there have been few attempts trying to analyze the explanatory mechanisms of the effects of interparental conflict on long-term adjustment and adult relationships of sons and daughters.

In the present study a theoretical model of the mechanisms underlying the relationship between interparental conflict experienced in childhood and adaptation of sons and daughters in adulthood is proposed. This model is mainly based on the EST developed by Davies & Cummings (1994).

The long-term effects of interparental conflict on children have not been explained from this perspective before. However, some of the hypothesis included in

the EST which are close to the idea of the stability of the internal working models in the Attachment Theory, suggest that the emotional security in different family subsystems could also explain the long-term effects of interparental conflict on the adjustment of children (Cummings & Davies, 2010). According to the EST, the negative representations of the consequences of interparental conflict for the family stability and well-being guide the interpretation and reactions to new or challenging relational events (Davies, Winter & Cicchetti, 2006).

So, based in the EST, our model suggests that emotional security in multiple family relationships, as it is a self-regulated control system, is vital to understand the long-term effects of interparental conflict experienced during childhood. That is, this model proposes that interparental conflict experienced in childhood has an impact on sons' and daughters' psychological well-being and relationships in early adulthood through its impact on emotional security in the interparental subsystem and in the family system as a whole.

2. Design

Based on the review of the relevant scientific literature in this field, we have proposed a causal – explanatory model of the long-term effects of interparental conflict. Based on this model, we have somehow "forced" the line of causality by asking participants retrospectively about the interparental conflict experienced in childhood. However, the cross-sectional design of the study makes impossible to confirm the existence of causal relationships between variables. Therefore, the conclusions will be always tentative and they should be verified in future longitudinal studies.

This type of design is useful because these are the first stages of research in this field, and the results may provide the basis for future longitudinal studies.

3. Objective

The present work analyzes the validity of a model developed to explain the long-term effects of interparental conflict experienced in childhood in both symptomatology and quality in relationships in adulthood. Emotional security in multiple family contexts is suggested as the intervening mechanism, based on the EST.

4. Method

4.1. Participants
The sample is composed by university students all around Basque Country. 603 participants took part, whose average age was 20.84 years old (SD = 1.78). Most of the participants were women (74.9%).

4.2. Instruments
- Initial questionnaire (ad hoc): Socio-demographic data, relational history.
- Children's Perception of Interparental Conflict (CPIC; Grych, Seid & Fincham, 1992).
- Symptom Check List-90-R: Anxiety, Depression, Interpersonal Sensitivity and Hostility (SCL-90-R; Derogatis, 1983).
- Security in Interparental Subsystem scales (SIS; Davies, Forman, Rasi & Stevens, 2002).
- Security in the Family System scales (SIFS; Davies & Forman, 2005).
- Index of marital Satisfaction (IMS; Hudson, 1992).
- The Positive and Negative Quality in Marriage Scale (PANQIMS; Fincham & Linfield, 1997).

4.3. Procedure

After a rigorous process to get Spanish versions of SIS, SIFS and PANQIMS, the questionnaires were applied in the classroom, under the supervision of the researcher. SPSS 17.0 and EQS 6.0 were used for the data-analysis process.

5. Results

Table 1. Index of Fit of the proposed model

Modelo	χ^2	g.l.	*p*	AIC	GFI	CFI	RMSEA	RMSEA *CI-*.90%
M1	86.98	5	<.001	76.98	.93	.86	.190	.156-.225
M1+Lagrange1	86.87	4	<.001	78.87	.93	.86	.214	.175-.253
M1+Lagrange2	86.87	3	<.001	80.86	.93	.86	.248	.204-.294
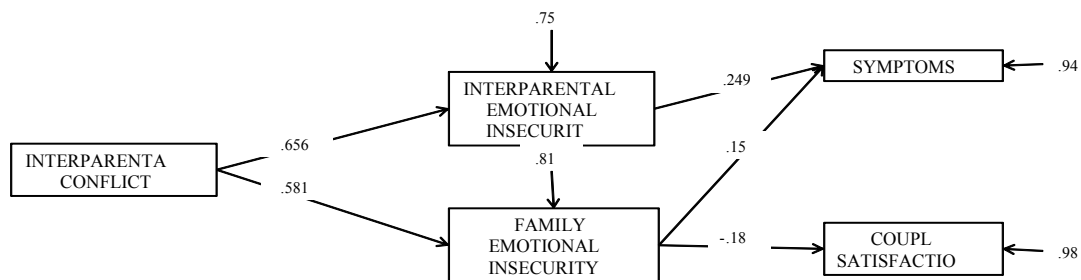
The figure above represents the final model which was the result of previous multiple-mediations analyses. Those non-significant relations were dropped out from the model. The index of relationship quality showed no relation with interparental conflict, so it was discarded from the final model. The analysis of the standardized structural coefficients, which were all significant, suggests that the interparental conflict predicted emotional insecurity both in the interparental subsystem and in the family system. The association between emotional insecurity in the interparental subsystem and psychological distress is moderate. However, the relationship between family emotional insecurity and satisfaction in the relationship is small.
We must remember that the model does not reach the optimal level of fit to the data, so these conclusions are tentative.

6. Discussion

With the caution derived from the poor fit of the model, we could conclude that the variables show relations between them which are consistent with the intervening mechanism proposed for the understanding of the long-term effects of interparental conflict experienced in childhood.

The interparental conflict has a high impact on emotional insecurity in both family contexts, even higher than the impact found in other studies using structural equation modeling. These have got coefficients around .20 (Davies et al., 2006;. Forman & Davies, 2003; Davies, Woitach, Winter & Cummings, 2008), while in the present study we got a .65 coefficient. These high values may be due to the effect of the design.

At the same time, the emotional insecurity in the interparental subsystem has a moderate effect on psychological distress, and the emotional insecurity in the family system has a lower effect on it and on the relationship satisfaction.

However, much of the variance in the outcome variables remains unexplained, suggesting that other variables that were not included in the model may explain psychological distress and satisfaction in the relationship.

7. Conclusions

In the future it would be neccessary the design of longitudinal studies using multiple informants and relevant assessment of the interparental conflict in childhood and the various aspects of emotional security from a developmental perspective. This may improve the understanding of the mechanisms explaining the impact of childhood experiences on adult well-being.

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STRESS VULNERABILITY AND QUALITY OF LIFE IN HEALTH–CARE WORKERS

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Abstract

Healthcare workers have been found to suffer from stress that increases burnout and may affect negatively their health, productivity at work, and general quality of life. Attempts to reduce the burnout of healthcare workers have usually focused on the stress itself by changing organizational characteristics or teaching stress reduction methods. When such interventions were successful they were of short duration. Hence it is advisable to explore other venues. The present study focused on examining the contribution of stress vulnerability and perceived stress to the quality of life. The participants were 120 healthcare workers. They were administered a stress vulnerability questionnaire based on the cognitive orientation theory, the scale of perceived stress and a multidimensional quality of life inventory. The results showed that stress vulnerability was related significantly and negatively to quality of lie but perceived stress was related neither to stress vulnerability nor to quality of lie. It is concluded that perceived stress and stress vulnerability tap different kinds of stress, whereby stress vulnerability may be the more basic and important one in regard to quality of life

Keywords: Stress vulnerability, Stress, Healthcare workers, Quality of life.

1. Introduction

A great number of studies show that healthcare workers suffer from stress. Long working hours, difficult decisions, frequent exposure to the suffering of others, time pressure, effort-reward gaps, bullying, aggressive acts on the part of clients, and health hazards on the job are only some of the factors that may be responsible for stress in healthcare workers (Schaufeli & Bakkar, 2004). Stress has been documented in healthcare workers in different countries and concerns physicians, nurses, social workers, and others involved in this industry (Cifuentes et al., 2008). A recent publication noted that healthcare workers seemed to be more stressed than other professionals, based on an analysis of calls to employee assistance programs (Stuart, 2013). The stress may bring about burnout, dissatisfaction, low productivity, health risks, and reduced quality of life (QOL) (Kheiraoui et al., 2012). The wellbeing of healthcare workers is of great importance because they constitute a great part of the working force, and are responsible for the wellbeing of the population in general.

This situation called for the development and application of means for combatting stress. Different programs have been tried and studied. Notably, the majority of these means focus on the stress itself, in an attempt to moderate, combat, reduce or cope with it. Reviews of the strategies of intervention for reducing burnout show that most are based on organizational changes and only a few are directed at the individual, such as teaching health professionals different coping skills (Marine et al., 2006). Both kinds show positive results in reducing burnout to some extent, but the effects are of limited duration (Awa, Plaumann & Walter, 2010). Therefore it seems advisable to explore further possibilities for reducing stress in health professionals. The suggested approach is based on two components: one is focusing on the individual

rather than on the organizational framework or work conditions, and the other is focusing on parameters that are not the stress itself but may affect it indirectly. A preliminary study showed that the amount of stress in health workers depends not only on the strength of the active stressors but also on the availability of actions and states relaxing stress (Toren & Kreitler, submitted). In the present study an attempt was made to apply the suggested approach by focusing on the individual's stress vulnerability.

Stress vulnerability was defined as a factor that impacts the individual's propensity to experience stress. The concept has been defined in the framework of the diathesis-stress models of psychopathology (Ingram & Luxton, 2005). Our use of this construct differs from these other applications in two major respects. First, it is not assumed that stress vulnerability contributes to psychopathology. Secondly, stress vulnerability is defined exclusively in terms of internal psychological variables without referring to situational and environmental parameters that may be considered as diatheses.

In the present context stress vulnerability was conceptualized in terms of the cognitive orientation (CO) theory (Kreitler, 2004). A major assumption of this theory is that responses of individuals in different domains are a function of a motivational disposition and a behavioral program, both of which are evoked due to some trigger. The motivational disposition affects the direction of the output, and the behavioral program controls the manner in which it is implemented. Both the motivational disposition and the behavioral program are affected by cognitive contents and processes, but of different kinds. Both are not determined by volition or conscious decisions.

Motivational dispositions are shaped by cognitive contents characterized in terms of formal characteristics and referring to contents identified as relevant for the particular behavior or output in question. The formal characteristics are beliefs of the following four types: Beliefs about self, beliefs about goals, beliefs about rules and norms and general beliefs (about others and reality). The identification of the contents is done for each specific behavior and is based on a systematic methodology, which consists in interviewing pretest subjects with and without the behavior in question in a three-step guided interview, whereby they are asked to state the meaning of the behavior, and then the meanings of the responses they have given three times in a row. The relevant contents are called 'motives' and they represent themes that have recurred in the deep-level responses of at least 50% of those with the behavior. The motives are used for formulating statements in the four types of beliefs. These statements are presented in the form of a CO questionnaire which provides four scores in the four belief types across the different motives (see Method). These four scores reflect the motivational disposition.

Stress vulnerability is conceived as a motivational disposition for stress. As noted, it does not represent stress but merely indicates a tendency to experience stress. This tendency is assessed in terms of beliefs and attitudes orienting towards s stress. None of these beliefs refers directly to stress, but only to themes that have been found in previous pretests as relevant for stress (see list in Method). The advantage of focusing on stress vulnerability instead of on stress itself is that stress vulnerability is more readily accessible to changes by means of focused interventions that would moderate stress indirectly. The study examined the relations between stress vulnerability and QOL. QOL was defined as the individual's evaluation of one's wellbeing in a great variety of domains of life (see Method).

2. Objectives and hypotheses

The goal of the study was to test the impact of stress vulnerability defined in terms of the CO theory on perceived stress and on the individual's QOL. Thus, the first hypothesis was that the CO questionnaire of stress vulnerability would be related significantly to perceived stress. The second hypothesis was that the CO questionnaire

of stress vulnerability would be related significantly to QOL, both in terms of the whole summative score as well as in terms of the specific sub-scales of the questionnaire.

3. Method

3.1. Subjects
The subjects were 120 health care workers in public hospitals and clinics in different parts of the country. They included physicians of different disciplines (37), nurses (n=48) and other health-related professionals: social workers, psychologists, art therapists, dieticians, physiotherapists, breathing experts (n=29), and administrative helpers (n=6). They included women (n=105) and men (n=15). Their mean age was 56.4 (Sd=7.9). All worked at least half time and had a mean seniority of 7.2 years.

3.2 Tools
Each subject got the three following questionnaires: a brief questionnaire of demographic information; the perceived stress scale- short version (Cohen, Kamarck, & Mermelstein, 1983) which included 10 items, each with 5 response alternatives ranging from 'never' (=0) to 'very often' (=4); the Multidimensional Quality of Life Inventory (Kreitler & Kreitler, 2006) and the CO questionnaire of stress vulnerability (Kreitler). The QOL questionnaire (version 4-2011) included 55 items, each with four response alternatives ranging from 'a lot' or 'very often' providing scores on the following 15 scales: Functioning in the family, Social functioning, cognitive functioning, functioning at work, basic needs, physical state, self esteem, sense of mastery, body image, motivation, stress, negative feelings, fun, positive feelings. The scales have been confirmed by structural equation modeling. A factor analysis in a previous study (Toren & Kreitler, submitted) showed that the 15 scales form 2 major factors: one represents QOL based on one's feelings (i.e., positive, negative, fun, stresss) and the otehr represents QOL based on one's actions and functioning (i.e., socially, cognitively, at work, in the family). The reliability coefficients (Cronbach alpha) of the scales are in the range of .76 to .92. The questionnaire has been administered up to date to over 2000 healthy individuals, and about 1000 patients with varying diagnoses (cancer, cardiology, diabetes, etc.).

The CO questionnaire of stress vulnerability included four parts administered together: one referred to beliefs about self (n=22), one to general beliefs (n=21), one to norms and standards (n=21) and one to goals and wishes (n=20). The reliability coefficients (Cronbach's alpha) for the four types of beliefs ranged from.76 to .82, and for the questionnaire as a whole .79. The items referred to contents representing the following 21 themes: Assuming responsibility, trying not to miss opportunities, disregarding priorities, controlling things constantly, need for certainty, trying to function in terms of a prior plan, effort to use time efficiently, constant attention to what goes on, trying to fulfill all commitments, feeling as if one were constant in an exmination, doing things without delay, rejecting help, high demands from oneself, trying to fulfill all the expectations of others, feeling one is not sufficiently esteemed, feeling one could achieve everything if one tried hard enough, assuming blame for failure, actng as if one's resources were unlimited, planning in general without considering details, trying to prevent being hurt or treated unjustly, and trying to accomplish one's commitments without considering teh prevailing circumstances. The items were statements, such as "I try not to miss any chance that life offers me" or "In life there are no priorities: whatever you do is the most important thing". Responses were given in terms of four response alternatives ('very true' to' not at all true'). Each subject got four scores representing the responses in the four types of beliefs.

4. Results

The first step of the analyses focused on the relations between the scores of the CO of stress vulnerability and perceived stress. The only significant correlation was

between beliefs about self and perceived stress (r=.19, p<.05). Further, also the correlations between the QOL scores and perceived stress turned out to be nonsignificant (for the total QOL score and the QOL factor based on functioning) or low (for the QOL factor based on emotions: r=.22, p<.05).

The next step in the analysis dealt with the relations between the scores of the CO of stress vulnerability and the QOL scores. Regression analyses showed that the four scores of the CO of stress vulnerability were related significantly in a negative sense with the overall score of the QOL (see Table 1) as well as with the two factors of QOL representing the different scales. Thus, for the QOL factor of emotions, F=6.22, R^2 = .240, and for the QOL factor representing functioning, F=8.86, p<.01, R^2 =.372. In both cases the relation of stress vulnerability to QOL was negative. Controlling for the profession (physicians versus others did not affect the reported results significantly.

A structural equation analysis was done for the four types of beliefs and the two QOL factors. The results showed a good model fit (Model fit summary: CMIN=28.195, p=.013, CMIN/DF=2.014, NFI=.902, TLI=.891, CFI=.945, RAMSEA=.080). Perceived stress was not included in the analysis because its relations to the four types of beliefs and QOL were weak and largely nonsignificant.

Table 1. Results of regression analysis with the four belief types based on the CO questionnaire of stress vulnerability as the predictors and t=QOL total score as the dependent variable

	Beta	B	SE	T	F	R^2
Beliefs about self	.337	.238	.085	-4.817 (p=007)	9.315 df=2,118, (p<.000)	.237
General beliefs	.403	.403	.118	-3.408 (p=.001)		
Beliefs about norms	.261	.261	.113	-2.317 (p=.024)		
Goal beliefs	.411	.411	.113	-3.642 (p=.001)		

5. Discussion

The results showed that perceived stress was basically unrelated to the CO of stress vulnerability and to QOL. In contrast, the CO of stress vulnerability was related to QOL, both the total score and the two factors of QOL representing emotions and functioning. Thus, of the two hypotheses of the study, only the second was confirmed.

One possible reason for the finding that perceived stress was related neither to the CO of stress vulnerability nor to QOL is that perceived stress was assessed for "the last month" whereas the other two measures referred to the situation in general. This methodological difference between perceived stress and the other measures may have affected the contents of the responses given by the participants. Since the other two measures did not emphasize the current situation as perceived stress did, the participants may have disregarded the current implications of the CO of stress vulnerability and QOL. Yet, the nonrelatedness of perceived stress to the other measures may also indicate that perceived stress is a measure of limited scope and narrow implications. Current stress may rise or fall, without these changes having too much to do with more stable characteristics and tendencies, such as stress vulnerability and QOL.

Stress vulnerability and QOL were shown to be closely related. This finding may indicate that those who score high on stress vulnerability tend often to become stressed, a fact which impacts negatively on their QOL. Another possibility is that stress vulnerability as such includes tendencies which in themselves have a negative effect on QOL, which must not be mediated by evocation of the experience of stress. For example, the tendencies to assume responsibility for anything that happens and to blame oneself for failures, or the tendency to avoid wasting time doing things without delay may reduce one's QOL, both the general overall QOL as well s the emotional and functional manifestations of QOL. The second approach to interpreting the relation

of stress vulnerability to QOL is enhanced by the finding that perceived stress was largely unrelated to stress vulnerability as well as to QOL.

The relation of stress vulnerability to QOL indicated that all four belief types contributed to the relation. This findings is in accord with the expectation grounded in the CO theory and previous findings in other domains of behavior..

6. Conclusions

The study showed that stress vulnerability is a major factor that affects QOL. The effect on QOL is due to the attitudinal components that constitute stress vulnerability as conceptualized in terms of the CO theory. The effect of stress vulnerability on QOL does not seem to be mediated by perceived stress. Perceived stress and the stress represented by stress vulnerability seem to be two different phenomena which are not necessarily related. While perceived stress may be stress evoked by accidental circumstances that reflect the situation more than the individual's tendencies, stress vulnerability may be responsible for stress that has deeper roots in the individual's personality and hence affects QOL in a way that perceived stress does not. Accordingly, it is likely that perceived stress may be subjected to individual differences less than stress vulnerability. The implication seems to be that in order to improve an individual's QOL it is advisable to intervene in ways that may change his or her belies relevant in regard to stress vulnerability rather than to attempt to change that individual's life situation and work conditions in a way that may bring about a reduction in the incidents responsible for perceived stress.

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A STUDY INTENDED TO DEVELOP A TURKISH PROCRASTINATION SCALE BY ITEM RESPONSE THEORY

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Abstract

Although there are several definitions of procrastination, it can be defined as a behavioral characteristic or disposition as postponing or delaying to perform a task or to make a decision. Most of the research on procrastination has been performed on students' academic performance and a relation has been found between academic failure and procrastination. As for demographic variables, it has been reported that procrastination decreases by getting older and seen somewhat more common in men than women. Procrastination has been viewed as a constant construct to be a trait. Procrastination has been related to Conscientiousness and Neuroticism factors of Five Factor Personality Model. Variables such as self-image, self-esteem, self-handicapping, locus of control, depression, mood, fear of failure, perfectionism are some of the characteristics that are studied. Some contradictory and conflicting results of previous studies revealed the need for further studies on the topic. The aim of the study is to develop a Turkish scale to assess behavioral procrastination for the reasons mentioned above and due to the lack of a Turkish procrastination scale. In accordance with literature, first of all, an item pool of 77 items is formed and applied to a total of 509 participants, 165 women (32.4%) and 344 men (67.6%) between the ages of 18-61 (mean=35.33±9.23) in the preliminary study. Internal consistency of the target scale was found as 0.79 at this step. In line with the results obtained in the preliminary study, new items are added increasing the item pool up to 120 for the purpose of improving some of the weak items. The new form of the scale is applied to a total of 729 participants, 374 women (51.3%) and 355 men (48.7%) between the ages of 17-83 (mean=31.90±11.31). The data of this study is examined by classical theory and Item Response Theory (IRT) and number of items is reduced to 20 by item analysis. While item discrimination varied between 1.29 and 2.46, difficulty of the items was between 0.68 and 1.91. The internal consistency of the final 20-item scale was determined as 0.93. The new scale developed will allow to assessing behavioral procrastination as a personality characteristic in employees. In this line, this scale as a new instrument can be used in personnel selection, performance assessment and in likewise processes.

Keywords: Procrastination, Item Response Theory, Scale, Turkish form.

1. Introduction

Procrastination is defined as a trait or behavioral disposition to postpone or delay performing tasks or making decisions. It is seen as a dysfunctional habit, with psychological consequences such as guilt or negative mood, and a decrease in performance, and some social consequences (Van Eerde, 2003). Four or five different kinds of procrastination have been identified: 1) Academic procrastination defined as "putting off academic assignments until the last minute", 2) Life routine procrastination defined as "difficulty in scheduling when to do the many life routines and doing them on schedule", 3) Decisional procrastination defined as "the inability to make timely decisions in many life circumstances", 4) Neurotic procrastination defined as "the tendency to postpone major life decisions", and 5) Compulsive procrastination defined as "decisional and task procrastination in the same person" (Milgram & Tenne, 2000; Milgram, Mey-Tal, & Levison, 1998). Most of the procrastination studies have been performed on academic procrastination and on student samples and found related with academic failure (Beck, Koons & Milgrim, 2000). As for the demographic variable of

age, procrastination appears to decrease with age; as for gender, there is only a weak relationship between gender and procrastination, men appear to procrastinate only slightly more than women (Steel, 2007; Van Eerde, 2003). Relationship between procrastination and mood (i.e. state and trait affect) and personality (i.e. neuroticism, self-esteem, locus of control, extraversion, psychoticism, dominance seems to be inconsistent (Steel, Brothen & Wambach, 2001). On the other hand, investigations using the five factor model of personality show a strong relationship between procrastination and conscientiousness and related concepts such as distractibility, organization, achievement motivation and an intention-action gap. Procrastination shows weaker correlations with Openness to Experience and Agreeableness. There are aspects of Extraversion, impulsiveness and boredom proneness that lead to procrastination (Steel, 2007). There are also inconsistencies as for the relationship between procrastination and neuroticism, the relationship to neuroticism is somewhat weak, impulsiveness and vulnerability facets are the strongest predictors of procrastination (Watson, 2001). Procrastination literature demonstrates a fairly consistent relation between task aversiveness and procrastination where less enjoyable or less pleasant tasks are the ones most frequently associated with procrastination (Blunt & Pychyl, 2000). Due to inconsistent results in the literature on procrastination and lack of a measuring instrument in Turkish, the aim of the study is to develop a procrastination scale to measure behavioral characteristics of employees.

2. Methods

2.1. Preliminary Study
The item pool generated consisted of 77 items rated along a five-point Likert scale as "strongly agree" (1) to "strongly disagree" (5).

2.1.1. Participants
A total of 509 individuals with an age range between 18 and 61 (mean=35.33±9.23 years) participated in this study. Of this sample, 165 participants (32.4%) were female and 344 (67.6%) were male.

2.1.2. Procedure
The preliminary scale was applied to individuals who voluntarily accepted to participate in a scientific study in a period of two months.

2.1.3 Results
Item analysis of 77 items was conducted and item-total scale correlations differing between 0.08 and 042 were obtained. Item-total scale correlations of 43 items were below 0.30. Internal consistency of the target scale was determined as 0.79. Besides, items were examined by Item Response Theory (IRT) two parameters model and was seen that discrimination level differed between 0 and 2.165 values (a), and difficulty level differed between the values of 6.224 and 4.040 (b). Some of the items that showed low level discrimination, item difficulty and item-total scale correlations were excluded and the analysis were repeated. Despite the elimination of some of the items, internal consistency coefficient of the scale could not be raised to the desired level. Thus, in line with the results obtained, the contents of some of the weak items have been changed to improve them. Besides, by adding new items, the number of items in the item pool was increased to 120.

2.2. Procedure
At this stage of the study, 120-item scale generated in the preliminary study was administered to participants.

2.2.1. Participants

The new form of the scale was administered to a total of 729 participants with an age range between 17 and 83 (mean=31.90±11.31 years). Of this sample, 374 were female (51.3%) and 355 were male (48.7%). Some of these participants have been retested by one and two week's intervals. Total participants reached after one week interval were 111 people between the ages of 18-60 (mean= 33.87±10.42 years), of this sample 59 were female (53.2%), 52 were male (46.8%). After two weeks the number of participants were a total of 120 people between the ages of 18-60 (mean=33.74±10.37 years), of which 64 were female (51.2%), 61 were male (48.8%). Criterion validity study has been carried out on a total of 125 participants between the ages of 18-60 (mean 33.74±10.37 years), of which 64 were female (51.2%), 61 were male (48.8%).

2.2.2. Instruments

The Melbourne Decision Making Questionnaire developed by Mann, Burnett, Radford, and Ford (1997) and adapted to Turkish by Deniz (2004), and Five Factor Personality Inventory developed by Somer, Korkmaz, and Tatar using IPIP were the instruments used to assess criterion validity along with Procrastination Scale.

2.2.3. Procedure

The scale has been administered to volunteered participants individually in a period of three months. After the first administration the scale has been administered for test-retest study by one and two week's intervals. Besides, a group of participants completed the other scales used for criterion validity study.

2.2.4. Results

The data of this study was examined by Classical Theory and Item Response Theory; item analyses decreased the number of items to 20. It was seen that these items have discriminative level (a) ranging between 1.29 and 2.46, and difficulty level (b) ranging between 0.68 and 1.91. It was seen that all of the items except one item (model fit of item 81 χ^2 (12) = 21.18 p=0.05) fitted two parameters model (Table 1).

Table 1. IRT item parameter estimates and fit statistics for the Procrastination Scale

Items n=729	Slope	S.E.	Location	S.E.	Chi-Square	D.F.	p
Item 12	1.76	0.10	1.91	0.07	9.13	11	0.61
Item 28	2.42	0.12	1.10	0.05	15.75	12	0.20
Item 30	2.01	0.10	1.28	0.06	11.07	12	0.52
Item 40	1.84	0.09	1.37	0.06	7.42	13	0.88
Item 45	1.86	0.09	1.56	0.06	11.45	12	0.49
Item 54	1.60	0.08	1.02	0.07	19.59	12	0.08
Item 59	1.52	0.07	1.47	0.07	17.60	13	0.17
Item 70	1.83	0.09	1.43	0.06	16.41	13	0.23
Item 72	1.59	0.08	0.97	0.07	15.84	13	0.26
Item 73	2.46	0.12	1.01	0.05	14.44	11	0.21
Item 74	1.80	0.09	1.10	0.06	9.96	12	0.62
Item 81	1.85	0.09	1.15	0.06	21.18	12	0.05
Item 83	1.74	0.09	1.04	0.06	18.20	12	0.11
Item 98	1.29	0.06	1.09	0.08	21.76	14	0.08
Item 101	1.82	0.08	0.94	0.06	5.65	12	0.93
Item 104	1.98	0.09	0.68	0.06	17.97	11	0.08
Item 107	1.69	0.08	1.07	0.06	10.05	12	0.61
Item 110	1.56	0.07	0.73	0.07	20.40	13	0.09
Item 113	1.78	0.08	1.44	0.06	14.51	13	0.34
Item 114	1.66	0.08	1.10	0.07	9.48	12	0.66
Total					287.86	245	0.03

Item analysis of 20 items by classical theory revealed item-total scale correlations that ranged between 0.52 and 0.71. This 20 item scale considered as the final version of the scale, and its internal consistency coefficient was found as 0.93 (Table 2).

Internal consistency coefficients for the retest of the scale to a group of 111 people with one week interval was 0.92, and internal consistency coefficient for retest of the scale to a group of 120 people with two weeks was found as 0.93.

Table 2. Item Analysis of the Procrastination Scale for All Participants

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 12	39.00	217.90	0.58	0.93
Item 28	38.64	207.99	0.71	0.93
Item 30	38.65	211.67	0.66	0.93
Item 40	38.66	214.43	0.62	0.93
Item 45	38.86	214.33	0.60	0.93
Item 54	38.43	210.72	0.58	0.93
Item 59	38.67	215.69	0.56	0.93
Item 70	38.72	214.61	0.62	0.93
Item 72	38.36	210.72	0.59	0.93
Item 73	38.50	209.01	0.71	0.93
Item 74	38.56	209.41	0.64	0.93
Item 81	38.55	211.56	0.64	0.93
Item 83	38.43	210.80	0.64	0.93
Item 98	38.38	213.03	0.52	0.93
Item 101	38.41	208.86	0.65	0.93
Item 104	38.21	205.96	0.68	0.93
Item 107	38.43	212.10	0.60	0.93
Item 110	38.17	209.98	0.59	0.93
Item 113	38.78	213.61	0.59	0.93
Item 114	38.49	209.98	0.64	0.93

n=729; k=20; Alpha=0.93

According to the data of 125 people who completed The Melbourne Decision Making Questionnaire for criterion validity study along with the procrastination scale, the correlation coefficients were found as follows: -0.32 for Decision self-esteem sub-dimension, -0.28 for Vigilance sub-dimension, 0.30 for Hypervigilance sub-dimension, 0.43 for Buckpassing sub-dimension, 0.23 for Procrastination sub-dimension and 0.29 for Decision-Making total score. As for the factors of Five Factor Personality Inventory, correlation coefficient was -0.24, for Extraversion, 0.32 for Agreeableness, -0.63 for Consciousness, 0.31 for Emotional Instability, and -0.33 for Openness.

3. Discussion

Due to the lack of a measuring instrument in Turkish, we attempted to develop a new scale. First stage was to generate an item pool of 77 items, but it was found insufficient for the target instrument as a result of application. Then, item pool was increased to 120 items and applied to a group of 729 people and 20 items were selected by using both classical and modern test theories. Item selection procedure was performed using two parameters model of IRT, and item discrimination and item difficulty levels have been considered to eliminate the items. Thus, by deleting 100 items, the target scale consisted of 20 items. Discrimination of the items ranged between 1.29 and 2.46 and their difficulty ranged between 0.68 and 1.91. All of the items except item 81 fitted to parameters model. Even this item showed a minimum level of significance (p=0.05).

Items selected by classical theory showed item-total scale correlations ranging between 0.52 and 0.71. Internal consistency of the scale was found as 0.93. Test retest correlation coefficient between two administrations was found as 0.80.

Criterion validity study of the target scale performed on 125 people yielded results in the expected direction. Sub-dimensions of the Melbourne Decision Making Questionnaire showed correlation coefficients ranging between 0.23 and 0.43. The results showed somewhat weak correlation between the target scale and procrastination sub-dimension of The Melbourne Decision Making Questionnaire. Negative correlations between trait procrastination and consciousness (-0.57 to -0.79) and positive correlations with neuroticism (0.18-0.42) have been reported (Lee, Kelly & Edwards, 2006). Our results of -0.63 for consciousness and 0.31 for Emotional Instability seem comparable. The results of other factors in the literature are more inconsistent (Steel, 2007).

According to the results mentioned above, the 20-item procrastination scale developed has positive signs of being a relevant instrument to measure general procrastination. However, criterion validity studies using instruments that measure the same construct need to be done. As a conclusion, a lot of validity studies are needed.

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POST-TRAUMATIC GROWTH, COPING, AND SOCIAL SUPPORT AMONG DISASTER SURVIVORS IN PROVINCE OF YOGYAKARTA INDONESIA

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Abstract

Natural disaster caused many death victims, physical damage, and house destroyed. It was a relatively high level of exposure to potentially traumatic experiences. Traditionally research has examined the negative or pathological effects that trauma may have on individuals, as well as variables that are proposed to influence post-trauma outcomes. In recent years, empirical post-trauma research has broadened its scope to investigate positive changes that may also occur following the experience of traumatic event. This study examined coping and social support variables in relation to levels of post-traumatic growth among disaster survivors. The samples consists of 100 survivors of affectedness natural disaster earthquake in Bantul district and volcano eruption in Cangkringan Sleman district in Yogyakarta Province Indonesia. Data were collected several years after disasters in 2013. The measurement instruments used for data collection had subscales on post-traumatic growth level, coping, and perceived social support. Coping aspects divided into approach and avoidance coping. Possible predictors to post-traumatic growth were examined by regression analyses. Approach coping confirmed a significant relationship with post-traumatic growth scores. The result showed that approach coping and social support are siginificant predictors to post-traumatic growth. Implications for this research offer further highlight the needs for addressing approach coping and social support than the nature of traumatic event in rehabilitation program for disaster survivors.

Keywords: Post-Traumatic Growth, Coping, Social Support, Disaster Survivors.

1. Introduction

Indonesia is a hazard-prone country as it is situated at the meeting point of three active plates in the world: the Indo-Australian plate in the south, the Euro-Asian plate in the north, and the Pacific plate in the east. The three plates are moving and thrusting towards one another in such a way making the area prone to natural disasters such as volcanoes, earthquakes, tsunamis. The movement of the plates also causes the area to become a tectonically and volcanically active region (National Agency for Disaster Management, 2010). Thus, natural disasters occur almost every year in Indonesia, some of which hit Yogyakarta Province in May 2006 and October 2010 when two massive disasters, catastrophic tectonic earthquake and volcanic eruption of Mount Merapi, caused many casualties and extensive property damage.

Earthquake disaster occurred on 27 May 2006 at 05:55 A.M local time devastating the southern part of Yogyakarta province and the east southern part of Central Java province. The earthquake was measured at 5.9 on Richter scale or 6.3 (USGS) with the epicenter located in the Indian Ocean, at 8.26 South Latitude and 110,301 East Longitude or around 37 km from Yogyakarta city, in a depth of 33 km below sea level. The impact of the earthquake was catastrophic as it caused lots of death and destroyed thousands of houses. the worst impact occurred in Bantul district with 4,143 people dead, 12,026 people injured, 71,763 houses collapsed, 71,372 houses heavily damaged, and 73,669 houses slightly damaged, while the second place was occupied by Klaten district with 1,045 people dead, 18,128 people injured, 29,988 houses collapsed, 62.979 houses heavily damaged, and 98.552 houses slightly damaged (National Agency for Disaster Management, 2010).

Another disaster was the Mount Merapi eruption occurring between October and November 2010 which the impact was suffered by those residing Yogyakarta province and Central Java province. The eruption was the most powerful and the worst after its last eruption in 1870, causing a lot of casualties of both lives and properties. It was considered the worst because it had forced a total of 32 villages with a population of more than 70.000 people to leave their homes. Based on the statistical data from the National Agency for Disaster Management (BNPB), the total number of casualties caused by the eruption included 277 from Yogyakarta province and 109 from Central Java province (BNPB, 2011). The data also recorded there were a total number of 2,527 refugees in Central Java province and 12,839 refugees in Yogyakarta province.

According to the United Nations (UN), natural disasters are increasing in frequency and severity around the globe (Jacobs, Leach, & Gerstein, 2011). The rising population is one of contributors to the negative impacts of natural disasters because death tolls and devastations are greater in areas with more dense population. McFarlane and Norris defined a disaster as a potentially traumatic event that is cotively experienced, has an acurate onset, and is time delimited, and may be limited, and although the aftermath may be long term, the actual disaster has an ending (Bowman & Roysircar, 2011). An event may be traumatic to one person, but a disaster is experienced by a community, be it a town, a region, or a nation (Yutrzenka & Naifeh, 2008). Natural disasters often cause a number of psychological distress, but post-traumatic stress disorder particulary happens when there are many casualties in the disaster. The first reaction of the individual to disasters varies ranging from a state of shock, fear, sadness, and anger, which may be leading to a denial to the catastrophic events that have just occurred. Individual's ability to control his life decreased and a lot of predictable and real things threatened by the arrival of this unexpected disaster (Carson and Butcher in Aiken, 2001).

The disaster did not only give negative impacts, but also positive ones. Various reviews revealed that 30-90 % of individual reported some positive changes following a serious life event, and that the event provided a learning opportunity that helped them live their lives more fully (Park, Cohen & Murch, 1996). Positive changes following traumatic events have been empirically demonstrated after various kinds of violence, such as rape and sexual abuse, combat, and hostage taking (Tedeschi, 1999), living with AIDS (Siegel & Schrumshaw, 2000), suffering heart attacks (Affleck, Tennen & Croog, 1987), and war experiences (Powell, Rosner, Butollo, Tedeschi and Calhoun, 2003), natural and techonological disasters (McMillen, Zuravin & Rideout, 1995). These positive changes and experiences are called post-traumatic growth (Karanci & Acarturk, 2005).

Post-traumatic growth is the process of getting and maintaining perceived positive outcomes from a traumatic experience (Tedeschi, Park, and Calhoun, 1998). Many terms including found meaning, benefit finding, post-traumatic or stress-related growth, perceived benefits and self-transformation have been used to capture experience of positive change or growth (Siegel & Schrimshaw, 2000). In particular terms of post-traumatic growth has been used in reference to 'a sense' that personal growth resulted from a challenging life experience (Tedeschi & Calhoun, 1996).

Taking into consideration cross-cultural aspects, a contribution shall be thus made to explore the long-term consequences of natural disasters in Yogyakarta Province Indonesia. Why did some survivors reach post-traumatic growth? How did the people cope with the devastating disasters? What impacts did social support influence post-traumatic growth? What is the relationship between coping and social support to post-traumatic growth?

2. Objective

This study examined coping and social support variables in relation to levels of post-traumatic growth among disaster survivors in Yogyakarta Province Indonesia.

3. Methods

3.1. Samples
The samples consists of 100 survivors of affectedness natural disaster earthquake in Bantul district and volcano eruption in Cangkringan Sleman district in Yogyakarta Province Indonesia. The sample was 47% male and 53% female. The age of participants was 20-30 years 29%, 31-40 years 33%, 41-50 years 31%, and 51-60 years 7%. Sample was divided 50% as Bantul's earthquake survivors and 50% as Merapi Eruption's survivors. The educational background of sample was no school 6%, elementary school 36%, junior high school 25%, senior high school 32%, and university 1%. The marital status was single 12%, married 82%, and widow/widower 6%. All participants were muslim. Participants occupation was labourer 19%, teacher 2%, housewife 31%, and others 48%.

3.2. Measures
The measurement instruments used for data collection had subscales on post-traumatic growth level, coping, and perceived social support.
Post-Traumatic Growth. PTG was assessed with 21 items Post-Traumatic Growth Inventory (Tedeschi & Calhoun, 1996) that include aspects of perceptions of growth in relating to others, new possibilities, personal strength, spiritual change, and appreciation of life.
Coping. Coping was assessed with 24 items scale. These items were derived from 28 items of Brief COPE Scale (Carver, 1997) and were selected based on their high factor loadings. Coping aspects divided into approach and avoidance coping.
Perceived social support. Perceived sosial support was assessed by Multidimensional Scale of Perceived Social Support (Zimmet, G., Dahlem, N., Zimet, S., & Farley, G.,1988). This scale was constructed to assess individual's perceived social support

3.3. Analysis
Possible predictors to post-traumatic growth were examined by regression analyses.

4. Result and Discussion

Based on the statistical regression analysis, it found that approach coping confirmed a significant relationship with post-traumatic growth scores. The result showed that approach coping and social support are siginificant predictors to post-traumatic growth (F= 7,356; p= 0,001 < 0,05). R Square of approach coping and social support was 13,2% to influence post-traumatic growth.

Psychological research has long held an interest in identifying coping abilities that promote better adjustment in the aftermath of trauma. Many coping theories assume that survivors of trauma engage in a cognitive process of ascertaining meaning in relation to their experience in order to successfully cope with it (Folkman, 2008; Lazarus & Folkman, 1984; Regehr, Goldberg, & Hughes, 2002; Tedeschi & Calhoun, 1995). Coping is often referred to in terms of strategies, styles, resources, approaches, and skills. These terms may differ conceptually attribute and accounts for the predisposition for people to cope in certain ways. Alternatively, other researchers use the term *strategy* and advocate a contextual response, whereby coping is viewed as being flexible across situations and over time (Skinner, Edge, Altman, & Sherwood, 2003; Suls & David, 1996).

Current coping theories contend that the effectiveness of any given strategy is dependent on the context of the traumatic incident (Schulz & Mohamed, 2004; Zuckerman & Gagne, 2003). According to this view, any particular strategy that the person employs to deal with the trauma can be either adaptive or maladaptive depending on the circumstance. For example, Whealin and colleagues (2008) reviewed

a number of studies that have referred to adaptive and maladaptive coping influences, and other studies have differentiated coping strategies by using terms such as, functional or dysfunctional (Aldwin, 1994); transformation or regressive coping (Lazarus & Folkman, 1984), and Sharkansky et al. (2000) who examined the relationship between approach focused or avoidance focused coping strategies on the psychological illhealth in active military personnel (in Kirby, R., Shakespeare-Finch, J., & Palk, G., 2011).

The coping measure employed in this study was Brief COPE Scale (Carver, 1997). Based on factor analysis divided into 2 factors. First factor was called Approach Coping, comprises of 15 items: active coping, using emotional support, venting emotion, using instrumental support, positive reframing, planning, acceptance, and religion. Second factor was called Avoidance Coping, comprises of 9 items: denial, behavioral disengagement, self-blame, humor, and venting emotion (expressing negative feelings). The research result found that avoidance coping are recognized to post-traumautic growth in disaster survivors. Approach coping relates to direct attempts at problem-solving activities to relieve the source of psychological distres and relieved through positive reframing, and an optimistic outlook.

Social support is believed to help individuals evaluate events as being less stressful (Cohen & Wills, 1985), and it has been shown to positively influence health outcomes (Spiegel, Bloom, Kraemer, & Gottheil, 1989). Social support also has been related to posttraumatic growth (Park, Cohen, & Murch, 1996; Sattler et al., 2006; Tedeschi & Calhoun, 2004). Posttraumatic growth can be understood as the occurrence of positive psychological change that can come about when individuals respond to highly challenging life events. Although there certainly are negative psychological effects that can result from traumatic experiences, the phenomenon of posttraumatic growth provides evidence for the notion that one can also grow and learn from stressful events (Tedeschi & Calhoun, 2004).

Three general domain areas of posttraumatic growth have been identified in the literature (McMillen, 1999; Tedeschi & Calhoun, 1995). First, individuals who have experienced traumatic events frequently report a change in their own self perceptions. Specifically, they often describe increased feelings of self-reliance and self-efficacy, which can occur as individuals cope with the stressor that they have experienced. A second form of perceived benefit that people often describe after a traumatic event is a change in the quality of their relationships with others. In coping with a traumatic event, the individual may need a great deal of emotional or tangible support from others.When support is provided, this often leads the individual to see others in more positive ways and to grow closer to the people in their support network. Finally, a third form of perceived benefit that traumatized people often identify is a change in their life structure or their philosophy of life.After experiencing a traumatic event, individuals often recognize the vulnerability of life and, therefore, seemto develop a greater appreciation for it. Individuals also may reevaluate their spiritual lives, and for many people, this reevaluation leads to a strengthening of religious beliefs (in Tedeschi, Park, & Calhoun, 1998).

Social support is believed to influence the development of posttraumatic growth in a number of ways. Specifically, supportive others provide an outlet for the traumatized individual to talk about their experiences and, as such, the individual has an opportunity to receive emotional support, informational feedback concerning the stressful event and tangible assistance when coping with the stressor. As a result of these supportive experiences, the traumatized person may over time see others in more positive ways and may feel more confident in responding to the stressful event (Cryder, Kilmer, Tedeschi, & Calhoun, 2006; Tedeschi & Calhoun, 2004). Indeed, research has shown that traumatized people who have received support from others often report that they feel closer to significant others, that they engage in personal disclosure more often and that they are more compassionate and empathic when responding to others (McMillen, 1999). This influences between coping and social

support to post-traumatic growth help to explain following psyhological condition in disaster survivors in Yogyakarta Province Indonesia.

5. Conclusions

Implications for this research offer further highlight the needs for addressing approach coping and social support than the nature of traumatic event in rehabilitation program for disaster survivors.

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EFFECTS OF A MULTISENSORY/PHONIC INTERVENTION PROGRAM ON PREVENTION OF READING LEARNING DIFFICULTIES IN KINDERGARTNERS

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Abstract

The purpose of this research is to evaluate the results of a multisensory/phonic literacy intervention conducted with Brazilian children in last stage of kindergarten who present risk for learning difficulties in reading and writing. Participants are 36 children, with average age of five, students of a public school. The experimental design consisted of the following stages: pre-test, intervention, post-test one and post-test two. The research is ongoing, therefore, the partial data presented correspond to pre-test and post-test one stages. In pre-testing the children were assessed through evidence of letter knowledge, phonological awareness, reading and writing surveys. Children who had lower results than the average of the group in letter knowledge and phonological awareness and presented no understanding of the alphabetic principle in their attempts at reading and writing, were considered at risk (n=15). The children at and out of risk were divided randomly into two groups: Multisensory Group (MG) and Control Group (CG). Each group had two sub-groups formed by children at risk (MGr and CGr) and children out of risk (MGo and CGo). It was found no significant performance differences between the groups MG and CG.The Multisensory Group participated in three weekly intervention sessions lasting 35 minutes, during 16 weeks. The program consisted of exercises stimulating phonological awareness and regular correspondence between letter and sound through the use of multisensory stimuli (auditory, visual, kinesthetic and tactile), including motion with the whole body to represent the letter´s shape. The Control Group sessions were designed by placebo activities (storytelling and recreational activities) and occurred with the same length of Multisensory Group sessions. Post-test one was performed after four months. Statistical analyzes assessed the significance results obtained with intervention. Comparisons between pre-test and post-test one showed a significant difference for all abilities evaluated in MGr : letter knowledge, phonological awareness, reading and writing. The MGo presented significant difference for letter knowledge and phonological awareness. Furthermore, the performance of CGr and CGo presented significant difference only in letter knowledge. The data also revealed a significantly higher performance of MGr for all abilities assessed. Moreover, the performance of MGo wasn´t significantly different from CGo for any abilities evaluated. These results show an important effect of multisensory method with phonic emphasis to improve important abilities involved in literacy in children at risk for presenting learning difficulties in reading and writing. However, the question about the stability of these results still remains.

Keywords: Learning difficulties, Reading, Writing, Multisensory method, Phonemic awareness.

1. Introduction

Metalinguistic skills refer to the explicit knowledge of oral language such as the ability to segment and manipulate intentionally the speech in their phonological, lexical and syntactic aspects (Barrera & Maluf, 2003; Maluf & Gombert, 2008). Among these skills, phonological awareness refers to the ability of reflection, analysis and control of oral structure of words (Foulin & Mouchon, 2000). According to Lervag-Melby et al. (2012) phonemic awareness is the ability of reflection and analysis of the phonemic

segments of speech and it is a precondition for efficient reading learning, it is also the main predictor of individual differences in reading development.

The effectiveness of training in phonological awareness has been observed in several countries, such as Germany (Schneider et al., 1997), England (Bradley & Bryant, 1987), Norway (Lie, 1991) and Brazil (Capovilla & Capovilla, 2000). These studies have shown that early evaluation and intervention work as efficient mechanism to prevent difficulties in reading and writing learning, particularly those related to environmental or instructional inadequacy, contributing to improve school performance of children.

Montessori (1948) defended the active participation of the child during learning and considered motion one of the most important aspects of literacy. The Multisensory Method (Orton, 1925) aims to integrate different sensory modalities in teaching written language, establishing the connection between visual aspects (orthographic form), auditory (phonological form) and kinesthetic (movement needed to write). Researchers in the field of learning disorders seem to agree that the multisensory method is an effective procedure for teaching children with reading and writing difficulties (Oakland et al., 1998; Henry, 2002; Joshi, 2002; Capovilla and Capovilla, 2003; Schipper, Barby & Lipmann, 2008).

Based on the theoretical framework above, the objective of the research was to determine the effects of early multisensory/phonics intervention in kindergartners at risk for reading and writing difficulties.

2. Method

Participants: Thirty-six kindergartners with average age of 5,6 (years, months) from an Early Childhood Education Public School at Ribeirão Preto – São Paulo.

Material: Instruments for Pre-test and Post-test evaluations: (I) Letter knowledge task: consisting of the twenty-six alphabet letters, font Arial 72 (upper), randomly arranged; (II) CONFIAS Test (Phonological Awareness Sequential Assessment Instrument) Moojen et al. (2007). Consists of two parts, the first one related to syllable awareness and the second one related to phoneme awareness; (III) Writing task: composed of four animal images arranged in the following order: elephant (ELEFANTE), monkey (MACACO), duck (PATO) and bull (BOI). The child is asked to write the name of each one of them; (IV) Reading task: composed of six drawings and a sentence below each one. The child is asked to read and (V) Intelligence Test (Test of Raven's Colored Matrices).

For Experimental Group interventions we used specific teaching materials for multisensory/phonic method development (manageable letters in different textures, made with suede paper, polystyrene, sandpaper , EVA and cotton; mirror: so that children could observe the movement of the lips to pronounce the phonemes; written activities, mobile alphabet, manageable images of animals and objects). For Control Group we performed placebo activities such as: storytelling, recreational games, drawings and dramatizations.

Design: The research project was approved by Ethics Committee of FFCLRP-USP, (CAAE - 06583512.9.0000.5407). Experimental design consisted of the following stages: Pre-test, Intervention and Post-test. The children legal guardians completed a questionnaire of socio economic level. In pre-testing children were assessed through evidence of letter knowledge, phonological awareness, reading and writing surveys. The intelligence test was administered to all participants to exclude children with intellectual deficits. Children who had lower results than the average of the group in letter knowledge and phonological awareness and presented no understanding of the alphabetic principle in their attempts of reading and writing (Ehri, 2008) were considered at risk.

Children at and out of risk were divided randomly into two groups: Multisensory Group (MG) and Control Group (CG). Each group was composed by two sub-groups

formed by children at risk (MGr and CGr) and children out of risk (MGo and CGo). No significant performance differences were found between groups MG and CG in Pre-test stage. Multisensory and Control Groups participated in three weekly sessions lasting 35 minutes, during 16 weeks.

The Multisensory/phonic intervention activities were prepared based on Nico & Gonçalves (2008) and Capovilla & Capovilla (2007) studies and the script was: (a) Teaching letters sound and letters name; (b) Exercises of phonological awareness and regular correspondence between letters and sounds; (c) Teaching vowels (d) Contact with written material, oral and hearing stimulation; (e) Multisensory stimuli activities - auditory, visual, kinesthetic, and tactile; (f) Motion with parts of the body to represent the letters shape (movement). The placebo activities followed the script: (a) Storytelling, (b) Reflection about the story (c) Dramatization (d) Drawings (e) Recreation. The Post-test occurred after the intervention and consisted of the pre-test tasks reapplication to compare the performance among the different groups.

3. Results and Discussion

Statistical analyzes were performed to assess the significance of intervention results. To perform the intra-group comparisons (Pre-test x Post-test) it was used the Wilcoxon test (nonparametric test for comparing two related samples).

Table 1. Intra-group comparisons: Pre-test and Post-test

Groups	Letter knowledge	Reading	Writing	Phonological Awareness
MGr (N= 8)	Z= -2,527 p= .012*	Z= -2,000 p= .046*	Z= -1,994 p= .046*	Z= -2,524 p= .012*
MGo (N=10)	Z=-2,807 p= .005**	Z= -1,000 p= .317	Z = -1,300 p= .194	Z = -2,245 p= .025*
CGr (N=7)	Z= -2,371 p= .018*	Z= -1,342 p= .180	Z= -,577 p= .564	Z= -1,063 p= .063
CGo (N=11)	Z= 3,044 p= .002**	Z= 1,414 p= .157	Z= - 1,134 p= .257	Z= -1,856 p= .063

Note. * p < .05. ** p < .01.

The MGr results showed significant differences (p < .05) for all abilities evaluated, indicating a positive effect of the multisensory/phonic intervention in children's performance for Letters knowledge, Reading, Writing and Phonological awareness. The MGo results showed significant differences for Letters knowledge (p < .05) and Phonological awareness (p < .05). These results indicate that the intervention showed benefits even for children out of risk. Other studies have also shown that early identification of difficulties directly involved in reading and writing learning, such as cognitive and metalinguistic skills, followed by appropriate intervention, can improves the performance of the students. There is a consensus of these researchers: the development in early childhood education of these skills promotes reading and writing language learning in early stages of literacy (Schneider et al, 2000; Capovilla, 2008; Vellutino, 2007). The CGr results revealed significant differences only for Letters knowledge (p < .05). A similar effect was found in CGo. As these sub-groups participated of placebo activities, the improvement in performance may be attributed to teachers classroom work. For inter-groups comparisons (MG x CG) it was used the Mann-Whitney test (nonparametric test for comparison of two independent samples).

Table 2 shows the comparisons results between the performance of CGr and MGr groups. Statistical analyzes revealed no significant differences in Pre-test stage between the groups performance (p> .05). Nevertheless, comparative analysis of Post-test data revealed significant differences for all abilities. MGr presented better performance than the CGr in all tasks. This result agrees with several studies which indicate that early identification of difficulties in skills involved in reading and writing, followed by appropriate intervention, can improve the academic performance of students (Vellutino et al, 2004; 2006; Teles, 2010; Vedasy & Sanders, 2010).

Table 2. Inter-group comparisons: Multisensory Group at Risk x Control Group at Risk

	Pre-test				Post-test			
	Letters	**Reading**	**Writing**	**Confias**	**Letters**	**Reading**	**Writing**	**Confias**
Z	-,735	,000	-,382	-,527	-2,555	-2,548	-3,195	-2,211
Exact Sig.	.536	1.000	.779	.613	.009**	.021*	.002**	.029*

Note. Exact Sig. [2(1-tailed Sig.)]; * p < .05. ** p < .01.*

The comparisons between groups MGo and CGo in Pre-test and Post-test stages revealed no significant differences for all abilities evaluated (p> .05). Thus, for out of risk children, Multisensory/ phonic intervention appears do not have contributed significantly to a better performance on tasks or, at least, its effects can´t be checked in short time.

4. Conclusions

These results show a significant effect of the intervention with Multisensory phonics emphasis on developing of reading and writing in children at risk to present difficulties in literacy. The adaptation of Multisensory approach with the Phonic methodology seems to contribute to develop metalinguistic abilities in children from kindergarten, contributing to the learning of alphabetic principle. It seems that the integration of different sensory modalities in teaching of written language, beyond to reinforce the knowledge and the relationships letters/sounds, becomes the activities more attractive for children of this age. During the intervention period, it was noticed a large enthusiasm of children to carry out the activities, especially those related to body movement (a joke to perform the format of letters with parts of the body). However, these results raise questions about the stability of the performance observed. Would be seen this improvement in letters knowledge, reading, writing and phonological awareness performance in a longer period of time?

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PARENTS' AND TEACHERS' AGREEMENT ON BEHAVIOR PROBLEMS IN CHILDREN WITH READING PROBLEMS

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Abstract

The purpose of this study was to investigate the agreement between parents' and teachers' ratings on internalizing and externalizing scales of children with reading problems. Most studies, which investigate parents' and teachers' agreement on children are referring to general population and only a few (i.e. Rosenberg et al., 1988), investigate parents' and teachers' agreement on children with learning problems. Especially, this study was conducted in a province, where many behavioral problems in boys including school drop-out, violence and rule-breaking have been reported.

Two reading tests were given to all students (N=322) from 18 schools of the province of Mylopotamos, in the municipality of Rethimnon, in Crete. Four schoolchildren with mental retardation were excluded from investigation (n=318). From the assessment of 318 students from third and fourth grade (8+ to -10) on reading, eighty schoolchildren, whose reading performance was under 25% of distribution rates, comprised the group of schoolchildren with reading problems. The reliability concerning reading problems, based on low reading performance has been confirmed by Fletcher et al., (1994). Their mothers (N=65) and their teachers (N=79) assessed each child using Greek parent and teacher version of the Child Behavior Checklist respectively.

The results indicated that parents rated more children as having internalizing and externalizing problems than teachers, while teachers rated more children as having total problems than parents. To determine the magnitude of correlations between parents' and teachers' ratings we conducted Spearman correlation test. The correlations were higher for externalizing problems (p<.001) than internalizing (p<.05) and total problems (p<.01), but statistically significant. Findings are consistent with most investigations, which use samples from the general population (Achenbach et al., 1987; Roussos et al., 1999; Ende & Verhulst, 2004).

High level of agreement is important for two reasons: first, because it maximizes parents' understanding and acceptance of children's difficulties and consequently this understanding and acceptance of children's difficulties maximizes the agreement for appropriate intervention. Second, it is necessary in the planning of intervention programmes at the early stages of a child's academic development in order to reduce the incidents of students dropping out of school and perhaps diminish the increasing rate of violence and rule-breaking activity in the area of Mylopotamos.

Keywords: Reading problems, CBCL, TRF, Agreement.

1. Introduction

The assessment of children's internalizing and externalizing problems is based on multiple informants such as parents and teachers, who observe behavior in different settings e.g. home, school. Researchers and educators rely heavily on parents' and teachers' ratings of children's behavioral problems, because young children are not able to provide reliable information about their behavior. Most of the studies conducted thus far in different countries and different age groups indicate that parents rate more internalizing and externalizing problems than teachers (Roussos et al., 1999, Satake, et al., 2003; Cai et al.,2004, Deng, Liu & Roosa, 2004), and only a few studies indicate teachers rate more problems than parents (e.g. Shin et al., 2008).

The magnitude of parent and teacher agreement on emotional and behavioral problems has been low to moderate (Achenbach et al.,1987; Stanger et al.,1993; Satake et al., 2003). The agreement with regard to externalizing problems reach value between moderate to high and is higher for children aged 6–11 than for adolescents (Achenbach et al., 1987). On the contrary, the agreement on internalizing problems tend to be low, because they are often not visible and the adults may be not aware of them.

The high levels of agreement between parents and teachers' ratings are important, because students with reading problems or learning problems often exhibit emotional and behavior problems or children with emotional and behavior problems often appear learning problems. However, there have been a few studies that assessed agreement on behavior problems between different informants on students with reading problems. The agreement between parents' and teachers' ratings of children with learning disabilities was higher to externalizing-type behavior, but it was difficult to agree on internalizing-type behavior (Rosenberg, Harris, & Reifler, 1988) such as in most studies of the general population.

2. Objectives

The aim of the present study was to investigate the agreement between parents and teachers' ratings on internalizing and externalizing problems of children with reading problems, in the province of Mylopotamos, in the municipality of Rethimnon, in Crete. The province of Mylopotamos was selected because many behavioral problems have been reported including school drop-out, violence and rule-breaking. As it is known, this is the first study in Greece, which investigates parent and teacher agreement in students with reading problems and particularly in an area where it is difficult to carry out an interview with parents because of cultural beliefs.

3. Design-Method

Two reading tests (decoding and reading comprehension) were given to all students (N=322) in third and fourth grade (8+ to -10 years old) from 18 schools. Only two schools were excluded from the research because there were no children attending third and fourth grade. Four schoolchildren with mental retardation were excluded from the study (N=318). The two reading tests' reliability and validity was high (Venianaki, 2009). From the assessment of these 318 students on reading, eighty schoolchildren (N=80), whose reading performance was under 25% of distribution rates, comprised the group of schoolchildren with reading problems. The reliability concerning reading problems, based on low reading performance in children of the same age has been confirmed by Fletcher, Shaywitz, Shankweiler, Katz, Liberman, Stuebing, Francis, Fowler, Shaywitz, (1994).

Parents (N=65) and teachers (n=79) assessed each child with reading problems using Greek a parent (CBCL) and teacher version (TRF) of the Child Behavior Checklist. The CBCL and TRF are two standardized questionnaires designed to obtain parents' and teachers' reports of behavioral and emotional problems of children aged 6-18. Both instruments have 118 items concerning children' s behavioral and emotional problems and yield scores on five subscales, which are grouped into broad-band scales of internalizing and externalizing behaviors. The internalizing scale is the sum of items from three subscales: anxious/depressed, withdrawn/ depressed and somatic complaints. The externalizing scale is the sum of two subscales: rule-breaking behavior and aggressive behavior. The CBCL tests were given to parents and completed in the presence of the conductor of the research so that they would be completed appropriately without mistakes and misunderstandings. It was necessary to teachers too in order to avoid misunderstandings and any bias resulting from the children's behavior, because most teachers, who work as teachers in the

Mylopotamos province, come from other parts of Crete and Greece and either were afraid of completing a questionnaire on a child's behavior or considering all children especially males appear behavior problems.

We focused particularly on the two broad scales and total problems of both the CBCL and TRF, although we run analyses on the narrow band scales. We used only raw scores for the analyses on each scale, because the use of T scores would mask differences in base rates and level of perceived problems (Satake, at al., 2003). We examined the correlations between scores rated by parents and teachers. Not all scores of each scale showed normal distribution; therefore we used Spearman's rank correlations.

4. Results

The results indicated that parents rated more children as having internalizing (M= *8.58, Sd=5.10)* and externalizing problems *(M=11.88, Sd= 9.91)* than teachers (M=*7.73, Sd=5.90)*, (M=*9.17, Sd=11.13)*, respectively, but without statistical differences (p>.05). Teachers rated more children as having total problems (M=*38.13, Sd=24.46)* than parents (M=*37.38, Sd=16.64)* but without statistical differences (p>.05).

To determine the magnitude of correlations between parents and teachers' rating we conducted the Spearman correlation test. The correlations were higher for externalizing problems *(r=.612***, p<.001)* than internalizing *(r=.296*, p<.05)* and total problems *(r=.324**p<.01).* Results in the broad internalizing and externalizing scales are affected by the narrow scales. The magnitude of parents and teachers agreement has been low for internalizing problems but high for externalizing problems. Parent and teacher agreement on total problems is low to moderate *(p<.01)* because it is affected by scores from narrow scales in internalizing problems.

5. Discussion-Conclusion

The aim of the present study was to investigate the agreement between parents and teachers' ratings on internalizing and externalizing problems of children with reading problems, in the province of Mylopotamos, in Crete.

The low level of agreement on internalizing problems indicates that parents and teachers give different information about children's behavior. Achenbach, et al., (1987) reports that information gained from one informant is unique and cannot be substituted for information gained from another informant. Internalizing problems are more inner directed and appear to be more difficult for both parents and teachers to agree upon (Rosenberg, et al., 1988). The analysis of the results on the narrow scales on internalizing problems reveals parents tend to rate different items concerning emotional items as problematic. Children react differently to settings and adults (Cai, et al., 2004) and existing problems may be expressed otherwise in different contexts. For example, some parents consider that their children's behavior is appropriate and not problematic at home, but teachers consider this behavior as problematic, or vice versa. Another illustrative example of low agreement is when some parents consider their children's behavior as appropriate and it is, while the same children demonstrate different behavior at school, as they are more anxious, and nervous because of owning to reading problems and lack of incentives for learning. Teachers seem to assess more serious children's total problems than parents and it is expected, because school is more demanding, and restricted setting than home. Teachers also tend to report problem behaviors affecting academic performance, classroom management, and peer relationships. This is evidence that differences between teacher and parent ratings of behavior problems are at least partly due to differences in the environments in which adults observe children's behavior.

However, the examination of broad and narrow scales in CBCL and TRF indicates that the good agreement is limited to externalizing problems. The agreement

between the ratings of the parents and teachers with regard to externalizing problems indicates that these problems cannot be ignored, since teacher ratings for externalizing problems were the best predictor of referral for mental health services (Stanger et al., 1993). Without there being an intention of diagnosis, we must take into account that children with reading problems with co-existing externalizing problems are at high risk for rule-breaking behavior. Hence, high agreement on externalizing problems are deemed serious when they have reading problems at the early stages (8+ to -10 years old).

Further analysis of the behavioral problems that have been reported in this province is necessary. Do these findings reflect life's stresses or is it purely an artifact generated by cultural factors affecting responses to the instruments? (Roussos, et al.,1999). Even if it is an artifact, the combination of reading problems with high levels of externalizing problems explains school drop-out after elementary school, which is acceptable from the local community, as well as the incidents of violence and rule-breaking are being reported. This explains the reasons why high level of agreement in this study is important: Firstly, because it maximizes parents' understanding and acceptance of children's difficulties and consequently this understanding and acceptance of children's difficulties maximizes the agreement for appropriate intervention. Increased communication between parents and teachers can lead to greater understanding of children's behavior but also social-emotional protective factors (Winsler, & Wallace 2002). Secondly, because it is necessary for there to be planning of intervention programmes at the early stages of a child's academic development in order to reduce the incidents of students dropping out of school and perhaps diminish the increasing rate of violence and rule-breaking activity in the area of Mylopotamos.

Considering the existing economic and social circumstances, the planning of intervention programmes at the early stages of a child's academic development is necessary in order to deal with reading problems and to increase reading skills. Besides, there are more dimensions that have to be considered. Greek educational system has an academic orientation, while families' expectations are different. Curriculum, books, goals, aims and demands are not differed from urban, semi-urban or rural areas. Parents cannot help their children in daily homework, since parental educational levels in rural areas are lower (Roussos, et al., 1999). Results point to the need for multiple resources of accessing children and this is particularly necessary for children from rural areas, and of different cultural beliefs (Philips &Lonigan, 2010).

6. Limitations

This study has several methodological limitations. Firstly, the small sample size (N=80) of 8+ to -10 may limit statistical power of our findings. Secondly, the effect of gender, father-mother occupation, type of school has not been considered up to now. Thirdly, we only focused on internalizing and externalizing problems, but not on other problems, such as ADHD. Our results should be interpreted with caution.

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DIFFERENTIATING CULTURAL, SOCIAL, AND PSYCHOLOGICAL ATTITUDES TOWARDS SCHOOL COUNSELLING IN SAUDI ARABIA

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Abstract

There has been a sizeable amount of qualitative and quantitative research that has been undertaken in relation to the roles, impacts, and subjective and objective perceptions of 'student counsellors' or 'school counsellors' (SCs) in 'Western' countries such as the UK and the US. This type of research has often lauded the benefits of school counsellors, or positive attitudes of students and teachers towards school counselling and its conceptualisation. Yet there has been very little quantitative, qualitative, or mixed methods research of this type undertaken in developing countries, especially in countries with arguably more 'conservative', 'traditional', or 'closed' cultures such as the Kingdom of Saudi Arabia (KSA). There are potentially many reasons why this is so, including, for example, the more conservative and closed culture in KSA, close knit familial ties, and the high power-distance relationships inherent in a predominantly tribal culture. The research aimed to examine the existing psychological, cultural and social attitudes towards school counselling in KSA. A mixed methods research design was used with qualitative data consisting of semi-structured interviews of school counsellors, and quantitative data consisting of questionnaires completed by a sample of Saudi head teachers and SCs working in Afif schools. The research found SCs faced a number of difficulties preventing them from effectively carrying out school counselling duties, including negative perspectives of SCs by head teachers, teachers, parents, students, and even SCs themselves. It was found there was a severe lack of understanding regarding the role of SCs, as well as a distinct lack of cooperation from teachers and parents influenced by Saudi cultural traditions. Other problems included SCs being unqualified, given insufficient training, or being given work beyond their expected roles. This research proposes theories why cultural, social, and psychological attitudes towards school counselling in KSA are hindering progress in developing the field of school counselling in general. It attempts to differentiate and understand cultural, social, and psychological attitudes of teachers, head teachers, parents, and SCs to school counselling.

Keywords: School counselling, Childhood disorders, Parenting and social support, Culture.

1. Introduction

According to Mcleod (2013, p.3), counselling is an activity that emerged during the twentieth century and which reflects the pressures and values of modern-day life. Mcleod (2013, p.3) adds that "A counsellor is someone who does his or her best to listen to you and work with you to find the best ways to understand and resolve your problem. Counsellors do not diagnose or label people, but instead do their best work within whatever framework of under-standing makes sense for each client." In practice this framework of understanding may differ significantly depending on the particular context which a counsellor is working in. For instance, counselling at work may be different to counselling undertaken in schools. In fact, Bor, Ebner-Landy, Gill, and Brace (2002, p.1) observe that the school is actually a much more recent setting for the provision of psychological treatment of young people in the United Kingdom (UK). They note up until about ten years ago, most mental problems in schools were referred to specialists outside the school setting, and that there are a number of reasons for this change in attitudes towards school counselling (Bor et al., 2002, p.1). These include:

- *increasing challenges for school children, such as abuse; bullying; competitiveness; family crises; homophobia; peer pressure; racism; sibling rivalry; scholastic underachievement; social exclusion; and substance misuse;*
- *an increasing awareness of the role that that schools play in identifying, managing, and preventing health problems in schools;*
- *early identification of psychological problems can help to prevent major and more permanent behavioural problems in children;*
- *counselling as a profession is now better managed and regulated; and*
- *schools are considered a primary context for nurturing and supporting development (educational, moral, social) in children (Bor et al., 2002, pp.1-2).*

This increased use of school counsellors (SCs) in schools has resulted in a range of benefits. Firstly, past research has demonstrated that different types of psychotherapies (e.g. behavioural, psychodynamic, person-centred) are effective and beneficial to clients (Smith, Glass, and Miller, 1980). Secondly, counselling as a form of psychotherapy within schools has been shown to be effective as it:

- *helps to improve the overall attendance, attainment, and behaviour of students (Pybis, Hill, Cooper, and Cromarty, 2012);*
- *positive impacts students' learning/studying (Rupani, Haughey, and Cooper, 2012);*
- *reduces psychological distress (McArthur, Cooper, and Berdondini, 2012); and*
- *is a prevalent form of psychological therapy for young people (around 70,000-90,000 sought counselling) (BACP, 2013a).*

Taking into account these proven practices in schools in developed countries across the world, the development of a strong and robust school counselling framework for a developing country likes the Kingdom of Saudi Arabia (KSA) holds many attractions. The British Association for Counselling and Psychotherapy (BACP) has defined school counselling in the UK as "a professional activity delivered by qualified practitioners in schools. Counsellors offer troubled and/or distressed children and young people an opportunity to talk about their difficulties, within a relationship of agreed confidentiality" (Cooper, 2013, p.3). In comparison, school counselling in the KSA has been defined as a reactive process between counsellor and student where the counsellor helps the student "to understand himself and recognise his capabilities and potentialities and to give him an enlightened approach to his problem and how to encounter him. He also helps him to enhance his responsive behaviour and to prove self-conformity with the community" (The Ministry of Education, 1995)

There are many similarities in the underlying objectives of school counselling. In practice there are also differences in Saudi culture compared to Western school counselling methods (e.g. school religious oversight by the KSA Ministry of Education (MoE), Islamic (*Shari'ah*) law requires separate male and female schooling (Al Rawaf and Simmons, 1991)). There are specified problems that have been noted in relation to school counselling in KSA, including the lack of clearly defined roles, administrative support, and of a professional identity and status of SCs (Al-Ghamdi, 1999). A potential for ambiguity and role conflict in SCs' roles also arose because of differences among principals regarding the role of the SC (Alghamdi and Riddick, 2011).

2. Objectives

The overall aim of the research study was to investigate and explore the challenges and problems encountered by SCs in secondary schools located in Afif, a city in the Najd region of KSA. The research aimed to explore the roles of the SC, as well as school counselling from the point of view of headteachers (HTs), teachers, parents, students, the MoE, as well as the SCs themselves. In particular the research sought to examine the different cultural, social, and psychological (CSP) attitudes to school counselling that could be identified within the context of school counselling.

3. Design

The research design adopted by the research study can be described as a flexible, exploratory, descriptive study using a mixed methods methodology. The rationale behind this research design is the dearth of information and literature on school counselling in the KSA. It can be argued that this situation therefore favours a flexible, as opposed to a fixed or theory driven, research design. In addition, the lack of available research also lends itself less to the testing of pre-existing hypotheses through confirmatory research, and more to the generation of post-research hypotheses through exploratory research (Nebeker, (n.d)).

4. Methods

The research method used was mixed methods. Creswell (2013, p.217) notes that mixed methods collects and analyses both qualitative (*open-ended*) and quantitative (*closed-ended*) data. Data collection and analysis procedures such as sampling are conducted rigorously, and the two data forms are integrated together in the research design (Creswell, 2013, p.217). Both types of qualitative and quantitative data obtained were used to complement any proposed findings or themes. The research spanned 2008–2009 and used a total population of 44 HTs and SCs who were based in secondary schools for boys in Afif (Participants).

4.1. Qualitative Research Data

Semi-structured interviews were undertaken with five Participants located within various Afif secondary schools. Reliability was increased by individuals experienced in the field of education reviewing and pre-testing the questions in order to avoid ambiguity and to ensure the questions were clear. The Participants were asked a number of questions including (but not limited to):

- *To what extent do you think that all student counsellors in Afif schools are properly qualified and receive adequate training to do their task?*
- *How does the head teacher perceive the student counsellor's role?*
- *What support does the counsellor receive from all the people and officers he must deal with?*
- *What are the significant challenges and problems that the student counsellors face in schools?*
- *What ideas do you suggest to improve the student counsellor's role?*

4.2. Quantitative Research Data

A research questionnaire was designed and piloted, and was then distributed to a random sample of 12 HTs and 18 SCs. It covered a range of potential challenges and problems encountered by SCs from the point of view of the HTs and the SCs. The 22 item questionnaire contained a five-point scale (*always*, *often*, *sometimes*, *rarely*, *never*) as responses to issues represented as statements (**Erro! A origem da referência não foi encontrada.**). The 22 statements were divided over four dimensions related to problems encountered by SCs in respect of: the MoE; the School Administration and teachers; students and parents); and the counsellors themselves (with reliability measured by the split half and internal validity measured using Pearson's correlation coefficients (Figure 2).

Figure 1. Closed-Questionnaire Format

Statements		Always	Often	Sometimes	Rarely	Never
No.	In your opinion ,please circle the appropriate response					
1	The Ministry of Education appreciates the role of the student counsellor.	1	2	3	4	5

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Figure 2. Closed-Questionnaire Measurements

Variable	Items	Reliability	Validity (Pearson's *r*)
The problems related to the ministry of education	8	0.801	0.640
The problems related to the school administration and the teachers	6	0.792	0.701
The problems related to the counsellors themselves	3	0.824	0.720
The problems related to the students and the parents	5	0.783	0.681
Total / Reliability for the whole instrument	**22**	**0.815**	**0.700**

5. Discussion

The research findings demonstrated a broad range of factors and attitudes that were either hindering or preventing effective counselling in Afif schools.

5.1. Cultural attitudes towards school counselling

Overall cultural attitudes towards school counselling and SCs tended to be negative. There seemed to be a lack of trust between students and counsellors and there was evidence that students viewed discussing problems with counsellors as a sign of weakness. In practice this may be because of a closed culture and society in KSA, where close knit tribal and familial bonds mean private matters stay private, i.e. KSA is a dominant patriarchal and collectivist society, with a high level of uncertainty avoidance, and conservatism. In practice it is difficult to differentiate between cultural attitudes and psychological attitudes of students and parents, because many students were open to counselling but parents disapproved (i.e. keep family problems in the family). *Interviewee C5* noted the reluctance of parents to involve SCs "*we only see parents when their sons have a problem or are in trouble*", and *Interviewee C4* tried to explain this attitude: "*because of the culture and society in Saudi Arabia it is common for parents to be uncomfortable with the involvement of the counsellor in their son's life because they are considered private for the family*".

5.2. Social attitudes towards school counselling

Whilst there seemed to be some evidence highlighting positive social attitudes towards SCs from the students, overall social attitudes towards SCs also tended to be negative. There was evidence that HTs and other teachers severely misunderstood the role of SCs, or did not view them as 'professional', potentially because they viewed them as unqualified, lacking sufficient training, or because they believed the job to be easy. *Interviewee C1* stated "*teachers think that the counsellor has an easy job with a comfortable office*", and *Interviewee C2* stated "*the teachers consider that the role of the counsellors is to simply give out punishments, if the student misbehaves or neglects their homework, they are referred to the counsellor by the teacher*". There was evidence showing a lack of social and financial support from the MoE, and from the schools in terms of sufficient or adequate training. *Interviewee C1* stated "*if we had more training then we would be more able to overcome the problems that we encounter*". *Interviewee C4* noted his job would be much easier with an increased budget allowing him to purchase tools that he needed and providing counselling programs for students. *Interviewee C1* noted counselling courses were too short and did not provide suitable materials reflecting real life student problems.

5.3. Psychological attitudes towards school counselling

The psychological attitudes of other teachers towards SCs seemed to be one of lack of overall professional respect. Parents may also have been reluctant to involve SCs, to accept their input in private student matters, or to co-operate. This, together with other factors (i.e. limited budgets, lack of training, understaffing), may have significantly contributed to SCs feeling isolated and de-motivated. *Interviewee C3* stated "*There are those counsellors who are not motivated which can be detrimental to their performance as student counsellors*". SCs also felt they were given work beyond

their expected roles and found little administrative support from the schools to help with administrative workloads. *Interviewee C3* stated "*there is difficulty in the job because there are too many students to deal with in the school*". In this type of 'negative' workspace, where other teachers and some HTs view SCs as unqualified or lacking training, parents do not trust or co-operate with SCs, and SCs themselves feel de-motivated, psychoeducational approaches to school counselling are very likely to fail.

6. Conclusion

The research study showed SCs in secondary schools in Afif faced numerous difficulties which potentially obstructed their work and psychoeducational approaches to school counselling. These were differentiated into key themes relating to CSP attitudes, including cultural (*negative views of SCs, lack of trust, acceptance and cooperation from teachers and parents*), social (*lack of understanding of SCs' role, unqualified SCs*), and psychological (*understaffed, burdened and de-motivated counsellors*). These CSP attitudes are potentially hindering progress in developing successful school counselling programmes and initiatives in the KSA.

7. Limitations

Limitations included a small sample size which limited generalisability; cross-sectional (as opposed to longitudinal) study; and Saudi school gender separation meant that female attitudes and perspectives were not explored.

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CONSTRUCTION AND VALIDITY EVIDENCE OF SUCCESSFUL UNIVERSITY-TO-WORK TRANSITION SCALE

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Abstract

This research aim to construct and present evidence of validity of *Successful University-to-Work Transition Scale* (ESTUT). Was adopted a mixed method with the quantitative-qualitative design. Initially, this study sought, by discourse analysis to explore the theme "success in university-to-work transition" from the perspective of the newly Brazilian graduates. In a second stage to construct and validate a measurement instrument for this purpose. The qualitative study involved nine graduates from two Brazilian cities. To do factorial validation 168 newly Brazilians graduates participated. Qualitative results showed that success in university-to-work transition was described by eight categories : (1) trust and positive expectations, (2) gradual achievements associated to goals and career plans , (3) professional identity, (4) adaptation to the role of worker, (5) satisfaction with career path, (6) social expectations (work and good pay), (7) financial independence, and (8) social recognition for job performance. By these categories were operationalized 40 items were subjected to content validation and subsequently the factorial validity. The results indicated that the eight factors set out initially were reduced to six factors, namely: (1) trust and positive expectations, (2) satisfaction with the career path, (3) adaptation to the role of worker, (4) pay, promotions and financial independence, (5) work in the area , and (6) social recognition for job performance. "Gradual achievements related goals and career plans" and "professional identity" factors did not remain in the final version of the instrument, since their items were loaded on other factors or excluded for not having satisfactory psychometric indicators. The final version of ESTUT with 31 items and its six subscales can be considered suitable for use in the Brazilian context, since evidence showed acceptable validity and reliability. As a suggestion for future research would be interesting undertaken efforts to operationalize new items to translate better behavioral indicators related to the construction of professional identity and career planning, as these two factors did not show adequate psychometric characteristics, but were identified in the qualitative study as integrating elements that describe the experience of success in university-to-work transition. Furthermore, it would be interesting to researchers in other countries to collaborate with studies to adapt and validate ESTUT in other contexts.

Keywords: Success, University-to-Work transition; Measures construction.

BODY-ESTEEM AS PERCEIVED BY OMANI SCHOOL STUDENTS' GRADE 7 THROUGH 12

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Abstract

The purpose of the present study was to explore perception the body-esteem among school students. The sample consist 3030 students (1476 boys and 1554 girls) who were selected randomly from grade 7 through grade 12 in various schools in Omani Educational districts. A scale on body-esteem was administered consisting of body-esteem. Attempts were made to assure validity and reliability of this measure. Results were analyzed MANOVA to explore the effect of gender and class. Discussion was presented in terms of purpose of the study and related literature. Recommendations for future research are discussed.

Keywords: Body-esteem, School students, Oman.

1. Introduction

Body-esteem refers to how a person's mental concept of physical appearance has been the center for concern in research studies due emphasis in health and physical attractiveness. Taking into consideration the consequences of negative body image that include eating disorders, and obesity in adulthood (Streeter, Milhausen, & Buchholz, 2012). Depression, social evaluative anxiety, sexual difficulties and poor self-esteem (Cash, 1990).

Excessive negative body esteem may lead a person to engage in many eating disorder such as a anorexia and bulimia, both of which involve abnormal patterns of food intake (Pappalia et al 2008). Moreover, Perception of one physical appearance was found to be one of the main factors in predicting self-esteem. Shore and Porter (1990) research shows that girls as young as 8 to 9 of age may develop negative views of being fat and high level of body esteem satisfaction (Steese, Dollette, Phillips, Hossfeld, Matthews, & Taormina, 2006).

Beller (2007) suggests that people who are stressed about their physical health may have certain types of erroneous beliefs, which exacerbated their distress levels. For example, a person may believe he is powerless to do anything about it.

In contrast, developing a positive body esteem contributes to social confidence and comfort and may lead to successful and healthy life style change (Rangkakufnuwat et al, 2007)

The media play a significant role in how individuals feel about their bodies. Hoyt and Kogan (2001) revealed that people do feel more guilty, anxious, and depressed after viewing thin models in the media. Teenagers are believed to be among the heaviest users of many forms of mass media, particularly magazines and television (Burgess & Broome, 2012).

Other research studies have focused on the factors that influence body image such as gender, age. According to Rangkakufnuwat et al. (2007) indicated that women were more likely to be dissatisfied with their physical appearance than men. Dissatisfaction with body is likely to be quite stable in women.

Similarly Pappalia et al. (2008) reported that Concern with body image particularly among girls often begins in middle childhood -or earlier- increases in

adolescence and may lead to obsessive efforts at reducing weight. Girls dissatisfaction with their bodies increases during early to middle adolescence, whereas boys, who are becoming more muscular, become more satisfied with their bodies (Rosenblum & Lewis, 1999). In a cross cultural study Vereecken and Maes (2000) it was found that by age 15 over 50 % of the girls were dieting or thought they should be.

Mendelson, Mendelson, and White (2001) reported that female had a lower score in BE, and the difference appeared across the age range. In addition, the differences has apparently increased during the last 20 years (Feingold & Mazzella, 1996).

Similar findings reported by Esnaala et al. (2012) that boys manifest less body dissatisfaction and perceive themselves as less influenced by aesthetic corporal models than women. Furthermore body dissatisfaction decreases in older age group although the effect of age is less significant than the age is less significant sex.

However this finding has not been validated in other research for example Gallini (2007) demonstrated that boys and girls did not significantly differ on self-reports of body dissatisfaction nor did 9-11 year olds.

Body esteem instruments were based mainly in two different perspective of the definition of body esteem. One perspective emphasizes that body esteem is a global construct (Gray, 1977; Harter, 1985, 1988; Mendelson & White, 1985) regards body esteem as global construct. While the perspective suggested that body esteem is a much more multi-dimensional concept comprised of separate evaluations in specific domains (e.g. health and physical fitness, face and overall appearance, and physiques, muscular strength, size, shape, and aesthetics) as well as evaluations of global health (Cash & Pruzinsky, 2004; Cusack, 2000).

This study sought to explore the body-esteem in a larger sample of Omani school children from grade 7 through grade 12 a translated Arabic version of multidimensional body-esteem was applied to assess the prevalence rate depressive symptoms in a larger sample of Omani Children. As stated earlier, the research on the body-esteem Omani school students is fairly limited. In addition most of the studies in body-esteem have been done in western cultures. It can be argued that the reported findings regarding these variables are specific to the western cultures. According to Woodrow-Keys (2006) research into body-esteem would not be complete without considering the cultural framework that influence people's perception about their body. A study on a non-western population not only has the benefit of adding more to universal understanding of people's beliefs about their body-esteem. It has the virtue of being conducted on a population that is more "homogenous" in terms of culture, family, values and ethnicity.

2. Methods

2.1. Participants
The sample consists of 3030 (1476 males and 1554 females) who were selected randomly from grades 7 to 12 representing different schools representing various educational districts in Oman. Their ages ranged from 12 to 19 years old (M= 15.79, S.D=2.11).

2.2. Instrument
The body esteem scale for adolescents was used to measure body image. The scale demonstrated an acceptable reliability content validity index and construct validity. The (BIS) consists of 23 items, based on Mendelson et al. (2001), designed to indicate 3 dimensions: BE-Appearance (general feelings about appearance), BE-Weight (weight satisfaction), and BE-Attribution (evaluations attributed to others about one's body and appearance). The items were worded positively or negatively. For example "I feel that I am healthy", "My weight makes me unhappy". The items are each ranked on a 5 –point scale according to the level of agreement from strongly disagree

to strongly agree. The scores for the scale range from 23 to 115 with higher scores indicating higher conception of body-esteem.

The Cronbach's alpha Coefficient based on the present data was0.80 (male=0.75, female= 0.82), while in Mendelson et al. (2001) the Cronbach's alpha yielded 0.80.

2.3. Procedures

Measure was distributed to every participant in the classroom. The goals of the study were illustrated and they were instructed to respond to each item as honestly and as carefully as possible. The students volunteered filled in the measures in the spot. Panels of experts were used to assess content validity. Participants were assumed of the confidentially of their responses.

Data were analyzed using the statistical package for social sciences (SPSS). Descriptive statistics were used to determine means and standard deviations for the total sample on the body-esteem as well as class and gender variables. Mean values for the body-esteem measure was compared using MANOVA to identify any gender or class differences. The level of significance was set at $p>0.05$ for statistical tests. Before using MANOVA the data was examined for normality, linearity and homogeneity.

3. Results

The gender and class distribution of mean and standard deviation in all dimensions of the scale is reported in table (1).

Table 1. Means and standard deviations of body-esteem according classes and gender

Class	Gender	N	Appearance		Attribution		Weight		Body Esteem	
			M	SD	M	SD	M	SD	M	SD
7	Male	320	3.27	.55	2.92	.84	3.10	.59	3.13	.40
	Female	343	3.45	.67	3.18	.83	3.28	.76	3.33	.53
	Total	663	3.37	.62	3.05	.84	3.19	.69	3.23	.49
8	Male	169	3.44	.62	2.96	.81	3.25	.70	3.27	.50
	Female	197	3.65	.66	3.23	.87	3.45	.83	3.49	.62
	Total	366	3.55	.65	3.11	.86	3.35	.78	3.38	.58
9	Male	129	3.36	.62	3.09	.80	3.38	.77	3.31	.53
	Female	127	3.76	.72	3.45	.84	3.50	.91	3.59	.64
	Total	256	3.56	.70	3.26	.84	3.44	.84	3.45	.60
10	Male	75	3.74	.66	3.16	.92	3.54	.78	3.54	.58
	Female	71	3.70	.79	3.34	.92	3.57	.87	3.57	.71
	Total	146	3.72	.73	3.24	.92	3.55	.82	3.56	.64
11	Male	423	3.56	.63	3.17	.83	3.47	.77	3.44	.56
	Female	422	3.83	.73	3.40	.82	3.55	.96	3.63	.67
	Total	845	3.69	.69	3.28	.83	3.51	.87	3.54	.62
12	Male	360	3.59	.66	3.11	.86	3.44	.79	3.43	.57
	Female	394	3.78	.74	3.48	.85	3.45	.98	3.59	.65
	Total	754	3.69	.71	3.31	.87	3.45	.89	3.52	.62
Total	Male	1476	3.48	.64	3.07	.85	3.35	.75	3.35	.54
	Female	1554	3.70	.73	3.35	.85	3.45	.90	3.53	.64
	Total	3030	3.59	.69	3.21	.86	3.40	.83	3.44	.60

Note: N= number of cases, M= mean, SD= standard deviation.

To investigate whether there is a significant differences according to gender and class, MANOVA was conducted, and the results show statistical differences between gender and the interaction between them [Wilk's Lambda for class=.950, $F_{(4, 3025)}$ =10.408, p <.000, for gender=.970, $F_{(4, 3025)}$ =31.591, p <.000, for interaction=.991, $F_{(4, 3025)}$ =1.798, p <.029].

Univariate analysis of variance was conducted as follow test to the MANOVA. The results as in table 2 (Univariate analysis), and the Multiple comparisons analysis showed statistically differences in all body-esteem dimensions in both class (in which only the comparison between seven and each the other classes 8, 9, 10, 11, and 12,

while the other class comparisons are not significant), and gender (in favor female) variables, but in interaction was significant in only one dimension (Appearance).

Table 2. Results of Univariate on body-esteem according to classes and gender

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Class	Appearance	53.319	5	10.664	23.790	.000	.038
	Attribution	33.457	5	6.691	9.470	.000	.015
	Weight	45.267	5	9.053	13.391	.000	.022
	Body Esteem	44.287	5	8.857	26.345	.000	.042
Gender	Appearance	21.277	1	21.277	47.467	.000	.015
	Attribution	40.194	1	40.194	56.886	.000	.019
	Weight	5.369	1	5.369	7.941	.005	.003
	Body Esteem	16.321	1	16.321	48.542	.000	.016
Class × Gender	Appearance	5.317	5	1.063	2.372	.037	.004
	Attribution	3.210	5	.642	.909	.474	.002
	Weight	3.555	5	.711	1.052	.385	.002
	Body Esteem	1.683	5	.337	1.001	.415	.002
Error	Appearance	1352.803	3018	.448			
	Attribution	2132.442	3018	.707			
	Weight	2040.448	3018	.676			
	Body Esteem	1014.697	3018	.336			

4. Conclusion

As discussed earlier, body issues have become increasingly important and complex issues over the past decades, with numerous variables playing into perception of body-esteem. This has increased the need for continuing research in these areas of research. Much of the present research examines the many positive and negative harmful psychological effects body-esteem has on individuals. However, there is a limited research focusing on Omani health beliefs and body-esteem, whereas most of the research was done in western cultures. The present study attempted to examine how the health beliefs and body-esteem of Omani young people vary according to gender and specialization and how they relate to achievement level. The study also explored the relationship between health belief and body-esteem.

There are a few results that are worthy of discussion. First, there was no significant relationship between health beliefs and body-esteem. Nor there is any relationship between these both variables and student's GPA of much greater interest, significant differences was found between females and males in the body-esteem, where males had significantly higher mean scores than females and science specialization were higher than arts specialization.

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ELDERLY ANSWER ABOUT CONCEPTS OF AGING AND COMPUTER USE: EDUCATIONAL PSYCHOLOGY AND GERONTOLOGICAL PERSPECTIVE

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Abstract

The article was a collaborative group text, of researchers at PUCRS who deals with elderly, based on discussions about the themes and results of investigations about elderly concepts and utilization computers. Supported on the existing Gerontological, Educational Psychology, specially Positive Psychology, and Information and Communication Technology-ICT literature, and having the conscious of the multidimensionality of aging, adult learning processes and consequent adjusted teaching processes, in an Educational Psychology perspective, we intent to know better about real contexts. Educational activities designed for early childhood education are created to meet the needs of this age group, but the same practices are not necessarily adequate to be applied in adult education for elderly. In our qualitative investigations, the results appears better by triangulation between speech, writing and image, used in the methodological triangulation of data. We developed different digital inclusion courses, about their responses on use of computer and Internet, but at the same time know about their concepts and fears in use them, and also their concepts of aging. Our researches points to make the classes more interesting, put emphasis on affective interpersonal relationships, attend more closely, increase aspects of self-esteem. In these investigations, seniors often stereotyped perform comparisons between generations in order to belittle their own learning potential when they compares themselves to younger people. But when they start to act as students in the search for new knowledge and act, the vision of some inferiority is left out, giving way to new perspectives. Initially, their concepts of what is for them aging were, in most cases, simplified and, at the same time, linked in some way only to the biological dimension. After the digital inclusion workshops, especially using the Internet, they tell that had significant changes towards more complex vision of the phenomenon. Gradually, the view of exclusivity knowledge meant only for younger people has been changed, opening prospects for the meaning that age is no impediment to the formation of new knowledge or actions. The Internet did give its greatest impact in relation to the interest, concentration and intellectual curiosity, they did not manifest the same interest when the material used were book or printed articles. After our readings and discussions we can conclude that our courses using ICT have positive impact on the expression of personal feelings and actions, leading them to develop sense of competence and intense mobilization to overcome challenges.

Keywords: Elderly, Educational Psychology, Gerontology.

1. Introduction

Analyzing the daily, one realizes that the Information and Communication Technologies increasingly do this by playing a close relationship of dependence and need for the modern way of life. Gradually, the pace of contemporary life has been changed, incorporating new tools, words and meanings that, until recently, could easily be considered as inventions of science fiction, but are now used currently, also by elderly.

The lack of access to resources that provide the connection to computer technology increasingly is shaping up as an obstacle to participation and social integration, since the changes or technological developments witnessed in the last

three decades have come to form a whole new language and a new cultural mode being adopted on a global scale. The Computer composes a cognitive ecology, progressively impossible to imagine, for years to come, unrelated contexts of new technological reality. This, in turn, is a set of features that influence the culture and ways of constructing knowledge of the whole society (Lévy, 1993). This new reality has demanded the rapid development and application potential, reformulations in approaches to their use in the educational process in order to be an integrated directly to educational projects, as mediators in the educational process. And it requires constant effort to use the computer in educational approach that effectively promotes the construction of knowledge, abilities and attitudes (Perrenoud, 2001; Lévy, 1993).

As the use of the Internet have also a didactic character, there is need to reflect on the reality of each user, resulting in the discovery of the real needs, the expectations, the role of technological and methodological changes to be made for any person or a community (Sánchez, 2000). The awareness and increased investment for a technological literacy are becoming more present, due surveys, that there are numerous advantages that Information and Communication Technologies can offer in educational contexts. Among the contributions of Computing, is the qualification of the teaching work, articulated with the possibilities for his/her accessibility to Internet, as a source of information, and access to other cultures and scientific dialogue.

2. Aging

It is important to consider that many of the definitions of aging involve more negative than positive connotations, and when characterizing this process only emphasizes the gradual loss of biological, physical and psychological functions, the increased likelihood of death and a higher rate of disease. For many years, people with advanced chronological ages have been described with the word 'old', which, in turn, has a pejorative sense of what is old-fashioned, obsolete and unproductive. Aesthetic valuessuch as beauty, health, strength and vigor only recently have been assigned audience, which is a possibility of cultural change. Aging is a multidimensional phenomenon that includes changes in the biological characteristics of the person over time, bringing reflexes in behavior, intellectual ability, physical activity in social interactions (Néri, 2001).

3. Digital inclusion of older people

For some time between the release of the first personal computers and the past decade, generations appeared to be separated by the speed of technological changes: be technologically globalized requires financial stability to acquire the necessary be technologically globalized financial stability requires the acquisition of resources and conditions necessary for the ownership and production of knowledge. The elderly population is the fastest growing in the world, and Brazil's expectation of being the sixth country with the largest number of elderly people in next years (Ferreira, 2009). Age, culturally, remains more linked to intellectual stagnation and this understanding of age can be found within their own conceptions of aging when seniors who end up elect this stage of life as a time of rest of his/her life and says that have no need for new learning.

According Casara, Cortelletti & Both (2006, p. 24):

> We live in a prejudiced and segregating culture respect to age, which does not give they the treatment they deserve, making it a myth feared and poorly received by the elderly person who, in most cases, ends up absorbing the idea that is useless to society, interpersonal relations, ceasing to be an active subject of history and culture, worrying more deny this stage of life they are living than working for the maintenance of their pleasurable physical, mental, social and spiritual.

It's occurring gradually increasing of more active participation of seniors in society and in areas who, until recently, were seen as inappropriate for this audience, and among these, their education as students and, more recently, as users of Computer Technology. The use of information and communication technologies by older people can offer support for independence and physical stimulation to a full social engagement by promoting the dignity, self-esteem, which thus can enable a higher level of quality of life (Ferreira, 2009).

The information that most people over 75 years provides for Computer reveal an environment of extreme difficulty and complexity. The hoax also influence the decision to seek learning: many find that the device (computer) with its knobs and buttons, can be damaged by simply touching the wrong key. Our study (Ferreira, 2009) addressed the relationship between public and elderly people using computers is still preliminary, at the same time is more necessary with the progressive aging and longevity of the population.

Decreased visual acuity, hearing problems, changes in mobility, inadequate financial and cognitive limitations related to memory are identified as the main obstacles that may inhibit this population to learn to use the computer (Hendrix, 2000). These difficulties can be overcome using specific strategies as following stepwise learning, aiding the extent necessary, to provides opportunities to learn on their own pace and by frequent stops; provide good lighting and use large fonts and characters; working in small groups; and giving more time for the execution and for repetitions of these tasks.

4. Studies on the digital inclusion of older people

Some studies have reported differences in how learning occurs between the different age groups. What is noticeable is that the educational activities designed for elderly public follow the same methodology and didactics that is applied to people of different generations without taking into account the effects of attitudes, anxieties, and even the potential cognitive maturation (Terra & Dornelles, 2003). Researches point for development of specific educational projects for the elderly public, through a greater focus on their needs, interests and development itself (Stobäus & Mosquera, 2013).

This concern was also observed in studies that take into account the digital inclusion of older people, for example, the study of Kachar (2003), addressing the learning pace of elderly, concluding that they have their quirks and require greater understanding in teaching practice to respect the rhythm and tempo of each student to learn, because of physical limitations and possible cognitive and memory and attention diminution.

Czaja, Guerrier & Landauer (1993) conducted a study involving 36 women aged between 50 and 95 years, available in the home of each of the participants, with a computer with a simple text editor, access to news, weather information, movie and guidance on health and an e-mail. The results showed that the computer proved to be a useful tool, promoting social interaction and mental stimulation when used.

Laguna & Babcock (1997) researched about the anxiety generated by computer use among young adults and older adults, performing series of practical tasks, and the results indicated that older adults showed higher levels of anxiety and that this was related more to the performance on the task. The Echt, Morrell & Park study (1998) compared two groups of 46 elderly: the first between 60 and 74 years and the second between 75 and 89 years. The intent of the survey was to collect data on the conditions of the acquisition and retention of basic skills on the use of the computer. The groups were trained on basics of Computing, through interaction with a multimedia program and illustrated manual. The evaluation was made after training and was repeated after a week. As result they comment that the first group had better motor coordination, unless requested assistance/help and took less time in training. Both groups showed occasional forgetfulness on the resources of the computer and how to run them.

In search of Westerman and Davies (2000), Ferreira (2009) compared the results of two age groups. In the study with groups of younger adults and older adults were cited advantages of younger adults in relation to psychological, cognitive and in abilities, the speed of task performance and the trend to greater precision in the use of computational resources. However, we found that these differences might decrease with a larger number of training activities by older adults, some of which ended up featuring unique skills and capabilities, that put them in better conditions than younger adults. Current research points the importance of cognitive support, in which the practice of skills would be used as strategy to improve cognitive functioning in the elderly (Stuart-Hamilton, 2002). However, must seek knowledge in theories on aging ever built to better understand situations and providing educational initiatives to use the Internet that allow them to social-valorization, contributing to the improvement of their quality of life and the feeling of belonging.

According to Becker (2004), the Internet also enables elderly users to immediate access to health information resources that otherwise would not be available. In our research (Ferreira, 2009), conducted at the Pontifical Catholic University of Rio Grande do Sul- Brasil, digital inclusion workshops for elderly were held within the denominated Project Potentiality, and results that they had the first contact with the computer, with attitudes indicating a level of anxiety and genuine fear, clearly believing that, at the slightest touch, the machine would be broken physically, as part of the imaginary of some of these elderly group. They also believe that computerized resources do not belong to their daily lives, which contributed to technology seen as innovation intended only for youngers, generating uncertainty and insecurity by 'pure cognitive ignorance' to operate.

In another research, Goulart (2011), when questioned about their motivates to learn in adult courses, their answers were that there are several reasons to learn, like desire to, necessity to understand young people (children, grandchildren), to understand the world changes. Results also in improve family relationships and increases self-esteem.

Ferreira, Stobäus, Goulart & Mosquera (2011, p. 156) sad about elderly fears:

> When older people begin to have contact with the computerized means, especially with the use of the Internet, a new universe is presented and Prejudice and fear, which are often seen in their attitudes regarding the use of equipment or technologies 'new', just disappear before the number of options that are presented to them.

Then, in a perspective of the new Positive Psychology, there is a necessity to recognize the better elements who people have, and encourage their evolution in terms of, again, competences in knowledge, abilities and values. It was possible to identify in the activities developed that they are indicatives to the Aging of Activity Theory (Siqueira, apud Néri, 2001), which supports the idea that active people age better, finding replacements for lost papers. Social roles are stereotyped personalities, becoming personalities that remain not consolidated, leaving in the desire, the dream, the fantasy, the imaginary (Morin, 1999).

5. Final Comments

It was observed that elderly people who come to play a more active role in the use of computerized resources end up did say that developed a better adaptation to social and family context of technology, which until then were not inserted, that the achievements in their social space, and especially in their family after the 'digital literacy' ultimately refer the participants to further their development of self-concept towards a self-assessment and more positive appreciation for the people closer, favoring the emergence of a contemporary identity and greater self-education for the use of information technologies and communication. In the moment that computers are acquiring greater importance in the daily life, there will be a reduction in the number of

people excluded from the computerized context. And so, the next generation of seniors will be technically more qualified than the current generation.

From the moment that people will have more access to computer resources, opens up a new universe of perspectives on the possibilities and pathways that enable learning by acquiring new knowledge and reflects about it.

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A REALIST CONSTRUCTIVIST APPROACH TO UNIT DEVELOPMENT IN SCIENCE

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Abstract

This paper tells the story of the development of a science unit from a unique epistemological perspective—termed "realist constructivism." Science is one of the two content domains where cutting edge technology can play a key role in helping student grasp difficult to teach but nevertheless powerful ideas at the middle school level. Teachers in the approach to teaching and learning play a more direct role than they do in the typical constructivist-oriented approach in science, social studies, and other disciplines. The different role reflects the fact that this approach, termed "realist constructivism," is an "ideas first/inquiry second" variant on active teaching and learning.

The teacher in the realist constructivist approach is not expected to relinquish his or her expert status. Instead, that person adopts a stance, described in recent writings by one of the researchers as a "sage on the side" role that is mid-way between the traditional "sage on the stage" role and that of the inquiry-oriented "guide on the side" (Prawat, 2003). The process involved in this type of reasoning is termed "abductive." It proceeds as follows: (1) A surprising fact, C, is presented to an individual; (2) a big idea (H) is then suggested that, if true, would render C a matter of course; (3) this then leads the individual to conclude that there is reason to believe that H is true.

Data from an implementation study is presented that supports this novel approach to science curricula development. The focus in this study is on several big ideas related to weather: One is the notion that the sun's energy is stored and slowly released over the 24 hour cycle. The "surprising fact" associated with this big idea is the notion that it is coldest at sunrise—which runs counter to a common belief on the part of middle school students that midnight is the coldest time. The pilot results reported above suggest that the Realist Constructivist approach examined in this study--which involves teaching big ideas in science through the use of concrete, technology-mediated metaphors, represents a promising alternative to the "hands on," discovery approach favored by many reform-oriented science educators. It is fair to say at this point that additional research testing the more direct but still inference-based model of science discovery advocated here is in order.

Keywords: Science, Technology, Constructivism, Learning, Curriculum.

1. Introduction

The purpose of this study was to develop and explore the feasibility of an approach to science education that is based on a dramatically different view of scientific discovery, one that defines it as an imaginative, metaphoric process known as *abduction*. This view, also defined as "inference to the best explanation," is the brainchild of a philosopher and scientist named Charles Sanders Pierce, a man whose work dates from the second half of the nineteenth century but who is increasingly being seen by highly respected scholars like Susan Haack (1998) and A. I. Miller (1987, 2000) as having a great deal to say in the current debate involving epistemologists and historians about the nature of disciplinary knowledge. Most scientists have endorsed Peirce's view as well. Einstein, for one, insisted that it was "daring speculation" and not

the process of induction that changed the nature of physics at the turn of the twentieth century. The failure to realize this, he stated, constituted the "basic philosophical error" of the previous century (Miller, p. 99).

The main advantage associated with adopting Peirce's view about the origin of "big ideas" in science is that it manages to integrate process and content in this disciplinary domain in a way that applies equally to both the laboratory and the classroom. In both contexts, the role of knowledge is to open our eyes to important regularities in the world which enables us, among other things, to be more fully "in" that world. This approach does not require the teacher to downplay his or her status as "expert." Instead, the teacher adopts a stance that we have described in recent writings as the "sage on the side," a role that is mid-way between that of the traditional teacher, the so-called "sage on the stage," and the much celebrated inquiry-oriented teacher role known as the "guide on the side" (Prawat, 2003a). The assumption in the "guide on the side" approach, labeled "nominalism" by epistemologists, is that all knowledge is fundamentally self-knowledge (i.e., knowledge of inner sense is always the basis for knowledge of outer sense). Given the internal locus of knowledge, the nominalists believe, the motivation for sense making must come from within. This premise lies at the heart of inquiry-based learning. John Dewey explained the educational rationale for inquiry or problem-based a hundred years ago: "To appreciate a problem as such," he wrote, "the child must feel it as his own difficulty, which has arisen within and out of his own experience" (*EW 5*: 145). The teacher's role, given this assumption, is that of a provocateur--an individual who plays an indirect role in getting the student to recast prior experience and deal in more appropriate ways (i.e., more disciplinarily sound ways) with new experience.

The view of scientific discovery that lies at the heart of this proposal highlights an act of reasoning known as abduction. This process is thought to involve the use of creative intelligence, which is metaphoric in nature. Metaphors, in turn, function as lenses that allow us to directly access regularities in nature, albeit in a qualitative way. A. I. Miller cites a growing body of historical work in science that puts to rest the still commonplace notion that big ideas in science are induced from factual data. He summarizes this wrong-headed view of the scientific process as follows: "The scientist collects data, inspects the data, spins a theory that describes the data, and makes predictions, which are then tested to decide the theory's ultimate fate" (2000, p. 72). Miller, in his recent writings (1987, 2000) debunks this view, arguing that the scientist is not a fact-gathering machine. Rather, the act that fuels scientific discovery is a daring and imaginative one—and metaphor plays a key role in this process. "Metaphors provide access into possible worlds that can become actual ones," Miller writes (2000, p. 252). A metaphor functions as a kind of "coding scheme" that allows the scientist to access the regularity present in an object or event: One example might be viewing the plant as a food factory that produces a product and one or more by-products (e.g., oxygen), warehouses that product, and so forth. What a metaphor does, initially, is to bring to mind and, subsequently, instantiate key elements of the regularity discovered by the scientist

2. Intervention

The intervention began with the teacher, as instructed, ignoring for the moment a "At the end of the night" response that was offered by one of the more science savvy groups. The groups were asked to explain why they thought midnight was the correct response. Six of the 12 groups of pairs gave slightly different versions of the explanation "because that is the middle of the night." At this point, the teacher illustrated using her own laptop how to access the idea tool titled "Day/Night Simulation." This idea exploration tool depicted a small globe with a tiny red figure located somewhere in the Midwestern US. The globe had no tilt to simplify matters and the sun's rays were depicted as emanating from the right. The students could rotate the

globe by using their mouse from noon (where the tiny figure was profiled against the dark black sky, atmosphere being another complication that was eliminated in this simulation), around to sunset (where the figure was lost from view), to midnight (where the figure reemerged on the opposite side from the sun, another departure from reality in the interest of students grasping the idea), to, finally, sunrise (where the figure had barely emerged from the darkness). Associated with each rotation was a factually correct average temperature for the vernal equinox in the Midwest. What students saw, of course, was that it was coldest at sunrise. Our use of technology to present a surprising fact was the *first step* in the technology-mediated abductive process described earlier. The teacher, again as instructed, let the groups discuss this surprising result for a few minutes and then showed them how to access a second important "tool" on their computer.

At this point, the teacher engaged students in the *second* step of the realist constructivist process. This, as indicated, involved the use of a powerful metaphor to trigger the process of abduction. The purpose here was to provide a "lens" which allowed the students to see the regularity that, once grasped, allowed them to convert what was a surprising fact--in this case, the counterintuitive notion that sunrise and not midnight is the coldest time of day--into one that was viewed as a natural consequence associated with the hitherto unimagined regularity. The regularity that we want students to abduct, of course, is the notion that the earth, especially the oceans and the Great Lakes, slowly releases energy built up during the day over the nighttime hours.

To this end, students were presented in side by side boxes with two possible metaphoric "explanations" for the surprising fact that had been called to their attention: On the right there was a light switch which they can manipulate in an on/off position; in the off position, the box immediately darkens. On the left, there was a realistic representation of a pot of water on a gas stove in the process of coming to a boil. When they turned the knob beneath the pot, they turned off the flame beneath the pot. The pot contained a thermometer that showed the temperature slowly dropping when they stopped the source of heat. The question related to this metaphoric visualization tool which they were asked to respond on paper provided to each group was, "Which of these two images do you think fits best with what you have discovered about the coldest time of day? Why?"

The teacher, following instructions, spent a considerable amount of time (10 to 15 minutes) going over student responses with the class. She identified one or two of the most promising explanations, which the two-member groups were asked to incorporate into a revised answer to the question under consideration.

3. Results

Comparison of pre- and post-test achievement scores in the pilot tests provided compelling data that the realist constructivist approach was a viable way to get essential weather content across to students--and in a way that, apparently, combined the *comprehensiveness* of content coverage typically obtained using traditional, text-book based instruction with the *depth of understanding* one associates with more progressive (and labor intense) project- or inquiry-based instruction. This statement necessitates some further elaboration of the kind of data collected in the pre- and post-testing phase of the week and a half long version of the weather unit discussed in this paper. As indicated, we used a middle school grade classroom for the purpose of testing the approach used here.

In the pilot testing, we were able to do a 10-week follow up to see how well students retained content to which they had been relatively briefly exposed (e.g., 30 minutes or less). Students fared well even on items that they had great difficulty with on the pre-test: The question, "Where on earth does nature best store the sun's energy?" is an example. This item relates to a key idea in weather (not the one highlighted earlier): Namely, that water holds the sun's energy longer than land. Seventy-three

percent of the students selected "deserts" on the pre-test; the percent opting for this on the post-test was 33% but this percent dropped even lower on the 10 week follow up test. Only 20% chose this option while fully 72% selected the correct choice, "oceans and lakes." The remainder stuck with the third option, "mountains."

We obtained a similar pattern for other important test items, including the item that directly assessed the efficacy of the intervention described above. The answer to our "When is it coldest?" question is another example of remarkable retention for such a young group: *Sixty-seven* percent chose the most obvious choice, "midnight," on the pretest (see below), while *75%* and *68%* answered correctly ("sunrise") on the posttest and on the 10- week follow-up, respectively. Another example of remarkable retention over the ten-week interval was for the item "How does a blizzard form?" On the pretest, 81% of the fifth graders selected "two cold air masses collide" as the answer. Again, after relatively brief exposure to this content, 76% responded to the correct answer: "Warm, moist air from the Gulf of Mexico collides with cold, dry air from Canada." Fifty-seven percent of the students got this answer right on the follow up test (the third foil was as wordy as the correct one so that apparently was not the determining factor).

4. Conclusion

The pilot results reported above suggest that the Realist Constructivist approach examined in this study--which involves teaching big ideas in science through the use of concrete, technology-mediated metaphors, represents a promising alternative to the "hands on," discovery approach favored by many reform-oriented science educators. It is fair to say at this point that additional research testing the more direct but still inference-based model of science discovery advocated here (e.g., "abduction" vs. "induction") is in order.

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DESIGNING, BUILDING AND PRELIMINARY RESULTS OF "CEREBREX", A SERIOUS EDUCATIONAL VIDEOGAME

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Abstract

Videogames are currently amongst the most popular media among children and young adults. Although initially videogames were viewed as negative, recent studies have shown that they can be used for learning, improving grades, cognitive and non-cognitive skills. In this paper we discuss the ideas behind the design and implementation of the "Cerebrex" **a** serious educational videogame (SEG) from a motivational analysis perspective and show some of the preliminary results. Namely, we correlate each game mechanic we implemented with various motivation analysis perspectives including Self-Determination Theory (Deci & Ryan 2000), Uses and Gratifications Theory (Blumler 1974), Player Motive (Yee 2006) (Bartle 2004), A Framework for SEGs (Annetta 2010). Since Cerebrex is targeted at Guatemalan elementary 4th to 6th grade students care was taken to incorporate Mayan cultural aspects such as imaging, language and problems in a format they can understand. The game focuses on **four** main cognitive areas: Numeric, Rational, Memory and Visuospatial. Game mechanics were tested among a population of about 20,000 subjects in order to enhance engagement.

Keywords: *Serious Educational Games, Motivational Analysis, Blended Learning, Gamification.*

1. Introduction

Children nowadays are being constantly bombarded by various types of media; each one specifically crafted by specialists to grab their attention, ranging from TV shows, movies, cartoons, videogames, etc. On the other hand, most educational activities were not designed to be intrinsically motivating, "a central question concerns how to motivate students to value and self-regulate such [educational] activities, and without external pressure, to carry them out on their own" (Deci & Ryan, 1985). In other words, how can we grab students attention and make them *want* to study?.

Videogames have a magnetic motivational appeal for children, 97 percent of today's youth play videogames (Lenhart, 2012), and in 2010 in America total consumer spending on the games industry totaled $25.1 billion (Siwek, 2010), surpassing both the music industry ($15.0 billion) and box office movies ($10.5 billion) (Steinkuehler & Squire, 2014). Recently, researchers are using video games to help relieve pain, stress, do educational or health-related interventions (for a review, see Baranowski, Buday, Thompson, & Baranowski, 2008), demonstrating that games can positively influence both psychological and physical well-being (Przybylski, Rigby, Ryan, 2010).

In this paper, we discuss how we designed and implemented "Cerebrex", a serious educational videogame which focuses on developing four cognitive areas: Numeric, Rational, Memory and Visuospatial. The discussion focuses on various motivational perspectives. Preliminary results indicate that the use of Cerebrex in elementary schools in Guatemala has improved math scores, (Lemus, Baessa, Garcia 2014), IQ and scores (Pinto, Ajin, 2013).

2. What is Cerebrex?

Cerebrex is a Serious Educational Videogame developed jointly by Galileo University (research) and Elemental Geeks (implementation), which makes it research

based and gamers tested. Although we believe anyone can use it, it is mainly targeted at Guatemalan elementary 4th to 6th grade students of Mayan descent.

Figure 1. Cerebrex Main Menu

Figure 2. Cerebrex Welcome Screen

Cerebrex focuses on four main cognitive areas: Numeric, Rational, Memory and Visuospatial. It offers players three mini-games per area totaling 12 games. Each mini-game does quick (one minute) mental workouts aimed at improving its main area, it starts easy and quickly levels up according to each players individual capacity until it (ideally) reaches a state of flow (Csikszentmihalyi, 1990).

Besides the mini-games, Cerebrex incorporates an online and real-time assessment platform which helps: Students assess and be responsible for their own progress. For professors, they can measure and detect areas of improvement and for researchers to build better game mechanics and evaluate performance.

The mini-games included in Cerebrex were uploaded to the Facebook platform, where a population of about 20,000 adults (aged 18+) played the games, thus allowing us to fine tune game mechanics, reward systems, and fix programming errors.

In the next sections, we will briefly describe the game mechanics implemented and indicate the motivational theories behind its implementation.

2.1. Identity

According to Annetta (2010), 'A framework for serious educational game design' Identity is the basic foundational element of SEGs. Also in Self Determination Theory (SDT), relatedness requires "a sense of belongingness and connectedness to the persons, group, or culture disseminating a goal" (Ryan & Deci, 2000a). In order to implement this and achieve better immersion (Yee, 2006), we used various Mayan elements, symbolism, artwork, everyday artifacts, the Quiche language (derived from Mayan) and traditional instruments, rhythm, music and sounds.

2.2. Games as Content

Each mini-game tried to enhance at least one cognitive area, and some even resembled coursework such as solving arithmetic operations, helping them not only practice and review the content given in class (Fig 3, 4) but also as preparation for future learning (Belenky & Nokes-Malch, 2012) (Bransford & Schwartz, 1999).

Figure 3. Mini-Game: Ecuaciones level-1

Figure 4. Mini-Game: Ecuaciones level-4

2.3. Adaptive Challenges: Staying in Flow

Cognitive evaluation theory (CET) (Deci, 1975) argues which are the conditions that elicit, sustain, and enhance intrinsic motivation. (Annetta 2010) calls it "immersion".

Flow Theory (Csíkszentmihályi, 1996) has similar requirements as shown in (Fig.5) Challenge Level and Skill Level must be balanced in order to stay in the Flow Channel.

Figure 5. Flow Channel (Marczewski, 2013)   F*igure 6.* Lluvia de Gemas level-1
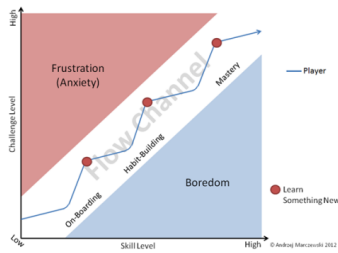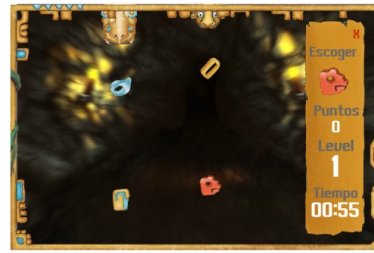
Figure 7. Lluvia de Gemas level-5   *Figure 8.* Lluvia de Gemas level-10

Fig. 6~8 shows the evolution of a particular game, in this visuospatial mini-game, the player is asked to collect a certain symbol. We can see how level 1 (Fig.6) only has 2 shooters (top) going in the same direction (bottom), the game starts at a low challenge and low skill, as the student progresses, the levels become harder, adapting challenge to skill, lowering or increasing the levels according to performance in order to keep with flow until he reaches mastery. (Fig.8) level 10 has 8 shooters in 8 directions.

2.4. Immediate Feedback

Immediate feedback not only plays an important role in keeping flow & intrinsic motivation. But can also be used as formative assessment (Cowie & Bell, 1999) and informed teaching (Annetta, 2010). To implement this, almost every action the student does in-game gives him an immediate response indicating if that action is helping him achieve his goal. The response is indicated visually in the form of a checkmark, verbally using the encouraging word "utz" (meaning well done) and with game points.

2.5. Rank

Playing can also be a social experience and satisfy the relatedness need. As game designers, one must create content for the various player types for which there are many classifications, but most of them have a "competitive" type (Sherry & Lucas, 2003) (Bartle, 1996). In order to support this, we implemented leaderboards (Fig.9)

Figure 9. Leaderboard.   Figure 10. Trophies and Badges.
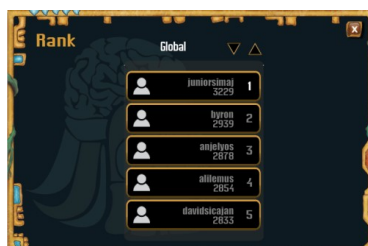
2.6. Trophies/Badges

Other types of players such as explorers, achievers (Bartle, 1996); guardian, rational (Keirsey, 1998), (Stewart, 2011); immersion (Yee, 2006), do not try to dominate others but themselves. For this type of players, trophies and badges were created. These are awarded buy accumulating points, leading to more practice time hence mastery on a specific game/cognitive area. Fig.10. There is three levels of mastery: Stone (beginner), Wood (intermediate) and Jade (master). If all mini-games in an area are mastered, then a special cognitive area achievement is unlocked.

2.7. Statistics and Reports

Another great aspect of videogames is to use them as research instruments (Calvillo et al, 2010), since every action the user takes can be recorded without being intrusive. This allows students to keep track and become responsible for their learning, teachers track potential problems students might have, researchers try new approaches and document every step of the process and game designers measure engagement and test new game mechanics. Fig. 11~12.

Figure 11. Student statistics per area.
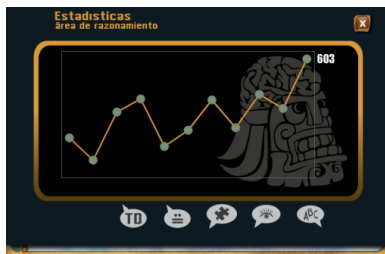
Figure 12. Teachers and Researchers can access online, realtime data of students.
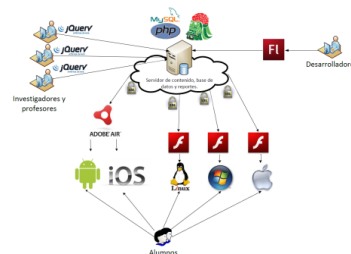
3. Preliminary Results

When Elemental Geeks finished the first mini-games, they were licensed as advergames and the leaderboard was used to select the winners of some marketing campaigns. One of the interesting finds was that although the rules disqualified players who had already won once, players would keep playing "just for fun" satisfying the free choice experiment (Ryan & Deci 2000a). This behavior appeared in all experiments.

Also in the use of Cerebrex in a school setting showed an average increase in math scores of about 84% more compared to just regular class (Lemus, Baessa, Garcia, 2014),. These findings show that the use of videogames as a compliment to traditional education might be a worthwhile path to pursuit.

4. Conclusions

In this paper we focused on the motivational aspects behind the design and implementation of the Cerebrex SEG. For a detailed list of all mini-games see (Pinto & Ajin, 2013). For preliminary results, see (Lemus, Baessa, Garcia, 2014).

It seems that humans are learning machines; we were designed to be at our fullest when we were expanding our capabilities, our knowledge… The flow state mentioned by Csikszentmihalyi seems in line with becoming the *subject of cognition* of Schopenhauer, it is at that point when one transcends human nature and becomes pure, will-less and timeless… and it is there where we must lead our children. It seems that over the ages we over standardized, over rationalized education, it is time to bring passion back to learning so we can win the war against other media and let our children become the Übermensch instead of "der letzte Mensch".

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MATERNAL ACCEPTANCE-REJECTION AND EMOTION REGULATION (ASSESSED BY ERICA) IN PORTUGUESE ADOLESCENTS

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Abstract

Rohner's parental acceptance-rejection theory (PARTheory) explains how, trough interactions with significant figures, the perception of self is constructed. The key concept of PARTheory is the claim that children that feel rejected by parents (along the development) will be predisposed to become hostile, emotionally unresponsive, emotionally unstable, and/or negative worldview. In this research study we analyze the relations between the perception of being accepted-rejected by mother, assessed by *CHILD PAQ-Mother* (short form, 24 items), and emotion regulation strategies, assessed by the *Emotion Regulation Index for Children and Adolescents* (ERICA, 16 items, MacDermott et al., 2010), in a sample of 268 Portuguese adolescents aged 12-to-15 years old, from public (47%), and private schools (53%). The translation and adaptation of the Portuguese version of ERICA was done for the present study; and psychometric evaluation presents a similar structure to the original instrument, reproducing the three dimensions: "emotional control", "emotional self-awareness", and "situational responsiveness", explaining 42.7% of the total variance (22.03%, 9.28%, and 11.36%, respectively). Data suggests that higher scores in ERICA (i.e., more adequate emotion regulation strategies) are correlated with lower perception of mother rejection; and that mother acceptance-rejection perception predicts emotion regulation strategies (as assessed by ERICA) in Portuguese adolescents. The ERICA qualities (reported in several studies, and cultural different samples) suggests that it is an easy/comprehensible instrument for these developmental period, and we think that it may also be use to enhance adolescents' awareness about their own strategies of emotion regulation.

Keywords: Mother acceptance-rejection, Emotion regulation, ERICA, PARTheory, Adolescents.

1. Introduction

The study of emotion regulation has been approached by the great classics of psychology, such as William James (cf. adaptive value in terms of physiological and behavioral response), Freud (defenses), Lazarus (effect of stress and coping strategies), and Bowlby (emergency of emotions regulation in attachment relations) – making this area a fundamental field to the understanding of adaptive development, and also to comprehend the mental health *vs* psychopathology genesis (Cole, Martin, & Dennis, 2004; Gross, 2002; Gross & Levenson, 1997). Over the past decades, emotion, and *emotion regulation* have become "hot topics" in psychological research (Izard, 2010); and research on emotion regulation is no longer a subsidiary of the study on emotion (Tamir, 2011). Several authors, like Kappas, Campos and colleagues, or Thompson (in Thompson, Winer, & Goodvin, 2011), for example, argue that *emotion* and *emotion regulation* can't be separated. To understand their thesis we must consider emotions as a kind of "tools" that orientate the evaluation we do about situations, events, others, etc., - so, emotions are inherently regulatory. That regulatory function, in our opinion, may be considered as an interplay between what we "*feel-think*-and *do",* in order to reestablish a kind of internal "*equilibration majorante*" (as

defined by Piaget) – i.e. an internal self-equilibrium (cognitive-affective) progressively more sophisticated.

In last decades two global approaches about the origin of emotions have been emphasized. a) one that is rooted in Darwinian tradition, argues that a number of basic emotions (e.g., disgust, happiness, sadness, anger, fear, surprise, interest) emerge according to a predictable maturation timing, serving adaptive functions for survival; b) a second perspective, cognitive oriented, suggest that the basic emotions should not be considered as existing in the first months, because the associated feeling – that is, the "psychological essence" of emotion – will only emerge when the child acquires the ability to assign meaning to the cognitive/emotional state associated with it; and those (firsts) cognitive meanings are constructed in the family (i.e., with the caregivers) (Calkins & Hill, 2007; Machado, 2007, 2009; Soussignan & Schaal, 2007; Thompson & Meyer, 2007). This second line of research explores the effects of parental variables in the development of emotion regulation strategies in children; although they not minimize individual variables (such as temperament).

So, if it is true that *emotion regulation* depends on biological maturation, its also true that that's not enough; a relational context – namely an *attachment support* – will constitute the ground necessary to make and create interpretations about events, feelings, expectations, etc. The first attachment figures will initiate child's construction of meanings about the world, and/or about people – those constructions, i.e., the attributions made by one "intermediate" that put a "label" on events, things, actions, persons, (etc.), are very impressive in a period were the child is not able to rationalize about (e.g., if the mother makes a loud cry every time her baby crawl to her; it's probably that the baby will be afraid, and interpret is approach movement to her like something wrong or bad). Those first socioemotional experiences are supposed to influence initials significances about the value of self, others and environment. Bowlby, and Rohner theories intend to explain, not only the origin and quality of relational bonds formed between caregivers and children, but also their influence along development (Rhoner, 2004). Rohner acceptance-rejection theory explains how, through interactions with significant figures, the perception of self is constructed; the key concept is that children that feel rejected by parents will be predisposed to become hostile, emotionally unresponsive, emotionally unstable, and/or negative worldview. PARTheory has two fundamental propositions: 1) people have a phylogenetic acquired need for positive response from significant figures, and, 2) children have a phylogenetic tendency to respond in consistent ways when they do not get the this need met (Hughes, Blom, Rohner, & Britner, 2005; Rohner, Khaleque, & Cournoyer, 2005). One of the consequences of being (or believe to have been) rejected by caregivers – in different cultures – is to become emotionally unresponsive and emotionally instable. High parental rejection is associated with higher level of anxiety and psychological distress (Hughes, et al., 2005; Hussain, & Munaf, 2012). As Bowlby attachment theory, the acceptance-rejection theory draws from the concept of "internal working models" (i.e., mental representations) – and those *models* will guide the more immediate response to stimulus/relationships.

Several authors emphasize the need to assess strategies for regulating emotions in situations of day-to-day, and not only, or necessarily, in situations that activate one particular stress; additionally the literature refer the need for further investigations in different developmental periods (as the middle childhood and adolescence), and across cultures (Gullone, Hughes, King, & Tonge, 2010; Phillips & Power, 2007).

2. Objectives & design

The main objective of this work – a cross sectional study – was to analyze the relations between the perception of being accepted or rejected by mother (assessed by the *Child PARQ Mother* (short form), and the emotion regulation strategies reported by

Portuguese adolescents. Additionally, we developed the translation and validation of the *ERICA – Emotion Regulation Index for Children and Adolescents* (MacDermott, et al., 2010) – for Portuguese adolescents.

3. Methods

3.1. Participants /Measures

Participants (N= 268; 54.1% girls, and 43.7% boys; aged between 12 to 15 years old, mean age = 13, DP=.92) were recruited from public (47%) and private (53%) schools (from Coimbra and Aveiro districts). The time to complete the scales (*ERICA*, *Child PARQ Mother*, and *SWL,* this last one not analyzed in the present paper) took 15 minutes (average).

Emotion regulation Index for Children and Adolescents – ERICA (MacDermott et al., 2010; Reverendo & Machado, 2010), is a self-report instrument – with 16 itens rated on a Likert scale of 5 points – assesses emotion regulation strategies in adolescents between 9-16 years.

Child PARQ Mother (short-form – 24 itens, rated on a Likert scale of 4 points) (Rhoner, 2004; Portuguese version from Franco-Borges, Vaz-Rebelo, & Tomás da Silva, 2010) – assess the perception about having being accepted/rejected by the mother. Four subscales evaluate "Warm/affection", "Hostility/aggression", "Indiference/Neglect", and "Undifferentiated rejection".

3.2. Results

We present briefly some data concerning the translation / adaptation of ERICA: is was conducted a principal components analysis of the 24 items Child PARQ Mother, followed by Varimax rotation; extracted three factors (confirming the original structure); a KMO=0.94 suggest a very good correlation, confirmed by Bartlett's sphericity test to be associated with a p=.000 . The variance explained by the three factors – *emotional control, emotional self-awareness*, and *situational responsiveness* – was 42.75% (22.03%, 28.09%, and 11.36% respectively); and the total scale alpha Cronbach=.73. All the three ERICA subscales correlated each other significantly, suggesting that they evaluate the same construct (Table 1.).

Table 1. Correlation between ERICA subscales, and global score

ERICA	Emotional self-awareness	Situational responsiveness	Global
Emotional control	.397**	.204**	.873**
Emotional self-awareness Situational responsiveness		.167**	.701** .501**

**p<0.01

Correlation coefficient *r* of *Pearson* was carried out in order to examine the relations between variables; testing the hypothesis that higher scores in emotional regulation related to lower perceived mother rejection (Table 2.).

Table 2. Correlation between da ERICA subscales and mother rejection

	ERICA		
	EC	Eself.A	SR
Mother rejection (perception of)	-.391**	-.366**	-.259**

EC=Emotional control; Eself.A =Emotional self-awareness; SR =Situational responsiveness **p<0.01

Linear regression was performed in order to determine whether perceived mother rejection would predict reported adaptive emotion regulation strategies (Table 3.).

Table 3. Influence of mother rejection (reported by adolescentes) on emotion regulation strategies

	β	*p*	R^2
Mother rejection	-.45	.000***	.20

***p<0.001

Results suggests the presence of a significative relation among the variables, with 20% of the emotion regulation variance being explain by the idea of having a mother who was (his) rejection (this relation is inversely proportional).

3.3. Conclusions

The interest in the study of emotion regulation (and the variables that contribute to its development) in different developmental periods has raised the need to create adequate instruments to evaluate the use of different (adaptive/inadequate) emotion regulation strategies.

Several researchers have, in last decades, gathered investigations that developed and evaluate the usefulness of self-report questionnaires for children and/or adolescents – the Emotion Regulation Index for Children and Adolescents (ERICA) is one of them. Given the good psychometric properties presented, we suggest the replication of ERICA use to reinforce data about ERICA with Portuguese children and adolescents. Comparison with other cultural samples with be very interesting in order to reinforce the study of variables involved in emotion regulation development.

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ATTACHMENT TO PARENTS (ASSESSED BY IPPA-R) AND EMOTION REGULATION (REQ-2) IN PORTUGUESE ADOLESCENTS

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Abstract

Attachment theory has become the most comprehensive approach to understand socioemotional and personality development in the context of parenting influences. This theory highlights the many ways in which the quality of early relationships between caregivers and the child may (gradually) shape emotional growth. The first ones to regulate internal/external arousal states of the baby are the parents. In doing so, they give the child a *meaning* (and a resolution) to what he/her is experiencing (or feeling). Indeed, the baby depends on caregivers for soothing distress, managing excitement and fear. Family influences are the first to shape de ways the child achieve competence and self-confidence in controlling his feelings. In the present study we analyze the relations between attachment to parents (assessed by Portuguese version of *Inventory of Parent and Peer Attachment*-R, Armsden & Greenberg, 1987; Machado, & Figueiredo, 2010), and emotion regulation (assessed by Portuguese version of *Regulation of Emotions Questionnair-2,* Phillips & Power, 2007; Pardal & Machado, 2012); in a sample of 185 adolescents, aged 12-to-15 years old (mean age 13.0, SD= 0.8), from public schools of Coimbra municipally. Data present significative correlations between the three attachments dimensions (i.e., "communication & closeness", "mutual acceptance & understanding" and "alienation") and *functional/dysfunctional strategies of ER* (i.e., negative correlation between *alienation* and *functional ER* strategies, positive correlations between *alienation* and *dysfunctional ER*; and positive correlations between *communication*, *mutual acceptanc/understandinge*, and the *global score IPPA-R,* and *functional ER*. Significative sex differences were found between reported ER strategies (with girls having higher scores in reported *external-funcional ER*, and in *disfunctional-internal ER* strategies). Regression analyzes suggests that attachment dimensions to parents predicts emotion regulation strategies reported by adolescents (5.2% of the variance of *external-functional ER* is explained by *communication/closeness*; 4.2% of the variance of *internal-functional* ER is explained by *communication/closeness*, and 4.2% by mutual acceptance/understanding; 8.7% of the variance of *external-dysfunctional ER* is explained by *alienation* to parents).

Keywords: Attachment, IPPA-R, Emotion regulation, REQ-2, Adolescents.

1. Introduction

First elaborated by Bowlby, and later updated and assesses by Ainsworth, attachment theory has grown from the concept used to describe affections' bonds between infants and caregivers to a broader concept that has implications throughout life span. Several works have confirm Bowlby's (1988) intuitions, namely his hypothesis that the nature of child's tie to his mother should be interpreted as the result of a preprogrammed set of behavior patterns, that have the goal of keeping the child in more or less proximity to his mother-figure (particularly in moments of stress) (Ainsworth & Bowlby, 1991; Bowlby, 1988; Machado, 2009). It is the *quality of care* experienced by infant – in terms of parental *availability*, *sensitivity*, and *responsiveness* to infants' clues – that determine the *quality* of attachment. The possibility to construct, and maintain, a secure attachment along development – and particularly in early years – is a fundamental basis to construct a self-representation as worthy, and an idea of the world as a safe place to live in. From previous experiences the child will form

internal models of others, the relationships, and the self. These internal models remain open to new input, i.e. they develop themselves; but Bowlby believed they become increasingly resistant to change.

If in infancy the parent-child *relationships* are the background that shape the quality of attachment – and, in that sense, we could say that attachment development is a *relational* process – later in life the *security* (or *insecurity*) inherent to attachment can be consider an individual characteristic (Ainsworth, 1989; Thompson, 2008). Between infancy and adulthood, the adolescence period may be particular interesting (and/or difficult) in issues about attachment relationships. Indeed, developmental tasks typical in this period – like the development of autonomy, individualization, and the capacity to establish, and deal with new significant relationships – may be particularly challenging to attachment issues. Attachment quality assumes a significative role in the achievement of adolescents' developmental tasks, namely on the sophistication on emotional regulation (Claes, 2004; Collins & Laursen, 2004; Kenny, 1994; Machado, 2007; McCarthy, Lambert, & Moller, 2006). The development of new forms of though – like formal operations – allow the adolescent to reinvent new interpretations (more complex, involving simultaneous several variables, e.g., "my friend was mad with me, not because he doesn't like me, but because he his upset about his mom …"; "if I was not so self-centered, maybe I would be able to have understand my mother perspective about my own selfish behavior"). Achievement in emotion regulation may be considerer a life-long developmental construction. New born are open to stimulation and show very early curiosity, interest and smile at people, at 3-6 months infant can anticipate what is about to happen and experience disappointment, they are to involve themselves in reciprocal exchanges with the caregiver; by 6-9 months they express more differentiated emotions, namely in "social interactions"; by 9-12 months, the "fear of strangers" is indicative of expectations about attachment to parents, and by 12-18 months they explore more actively their environment relaying on caregivers to regulate their arousal states (Papalia & Feldman, 2011). Progressively, children begin to develop a personal characteristic pattern of emotion reactions, and of emotions regulations strategies – those regulation processes will be strongly influenced by significative attachment figures and by cultural influences (Denham, Mitchell-Copeland, Strandberg, Auerbach, & Blair, 1997; Machado & Pardal, 2013). For example, "some cultures discourage expressions of anger, but place much importance on shame" (Papalia & Feldman, 2011, p.205). In this sense we could admit that the way that the "expression of emotions" will be considerer adaptive/dysfunctional depends also on cultural/social aspects. The thesis that emotion regulation is essential to wellbeing and adaptive development is universal: so it is that Gross and Levenson refer that "(…) over half of nonsubstance related Axis I disorders involve some form of emotion dysregulation" (1997, p.95).

In the developmental literature, emotion regulation is also a "hot" topic, highlighting the *how* and *why* they organize diverse psychological processes (Cole, Martin, & Dennis, 2004). In last decades there has been an increase in the studies on regulation of emotions throughout development; Gullonne and collegues refer the need to for further investigations in different developmental periods, as the middle childhood and adolescence (Gullone, Hughes, King, & Tonge, 2010; Gullone & Taffe, 2011).

2. Objectives & design

The main objective of this work – a cross sectional study – was to analyze the relations between attachment to parents (assessed by Portuguese version of *Inventory of Parent and Peer Attachment*-R, Armsden & Greenberg, 1987; Machado, & Figueiredo, 2010), and emotion regulation (assessed by Portuguese version of *Regulation of Emotions Questionnair-2,* Phillips & Power, 2007; Pardal & Machado, 2012).

3. Methods

3.1. Participants /Measures

The sample – 185 students from public schools in central region of Portugal (109 girls - 58.9% and 76 boys – 41.1%) was selected by the probabilistic method for convenience. The average age is 13.0, (SD = 0.80 minimum age of 12 and maximum age of 15 years.

The *Regulation of Emotion Questionnaire-2* (Phillips and Power (2007) is a self-report measure that assesses the frequency in which adolescents (between 12 and 19 years) use *functional strategies* and *dysfunctional strategies* of emotion regulation, arising from *internal* form (intrapersonal) and *external* (interpersonal) form. Composed by 21 items, rated on a Likert scale of 5 points; the higher the *functional internal* scores subscales (e.g. "I talk to someone about how I feel") and *functional external* (e.g., "I relativize the situation") will be, more *adaptive* or *functional* is the perception of emotion regulation. The higher are the scores on *dysfunctional internal* subscale (e.g., "I hurt myself somehow") and *dysfunctional external* (e.g. "I discharge my feelings in others by insulting them - yelling, arguing"), higher rates of dysfunction emotional regulation is.

The *Inventory of Parent and Peer Attachment* (Armsden & Greenberg, 1987; Portuguese version Machado & Figueiredo, 2010), is a self-report questionnaire, with 25 itens rated on a 1 (never) to 5 (always) points Lickert scale – distributed by three dimensions: "communication & closeness", "mutual acceptance/understanding", and "alienation" (e.g., "My parents help me to talk about my difficulties", "My parents accept me as I am", "My parents do not understand what I'm going now").

3.2. Results

We present data concerning internal consistency (alpha de Cronbach) of each subscale of REQ-2 (*Functional-external* dimension $\propto$=.73, *Dysfunctional-internal* $\propto$=.60, *Dysfunctional external* $\propto$=.64 Functional-internal $\propto$=.66); and internal consistency of each IPPA' subscale (*Communication & closeness* $\propto$=.95, *Mutual acceptance/understanding* $\propto$=.78, *Alienation* $\propto$=.83, IPPA-R *global score* $\propto$=.83).

Table 1. REQ 2 – descriptive statistic

		Mean	**(DP)**
REQ 2	*Functional-external*	14.01	(3.84)
	Dysfunctional-internal	15.90	(4.06)
	Dysfunctional external	7.35	(2.34)
	Functional-internal	21.65	(4.17)

Table 2. IPPA-R descriptive statistic

		Mean	**(DP)**
IPPA-R	*Communication & closeness*	46.56	(13.42)
	Mutual acceptance/understanding	25.69	(4.54)
	Alienation	19.06	(5.86)
	IPPA-R Global score	72.36	(16.76)

To analyze the relations between ER strategies and attachment dimensions, Pearson correlations were performed (Table. 3)

Table 3. Correlation between REQ-2 subscales and IPPA-R subscales

	Communication	Mutual acceptance-understanding	Alienation	IPPA-R Global score
Functional-external	.229**	.185**	-.224**	.226**
Dysfunctional-internal	-.395**	-.343**	.433**	-.411**
Dysfunctional external	---	---	.295**	---
Functional-internal	.206**	.206**	---	.227**

**p<0.01

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Functional emotion regulation strategies (internal and external) correlate positively with Communication/closeness and Mutual acceptance/understanding attachment to parents' dimensions (and also with global IPPA-R score). Dysfunctional-internal emotional regulation correlates positively with Alienation attachment dimension, and Dysfunctional-external emotion regulation correlates with Alienation attachment to parents' dimension. Dysfunctional-internal emotion regulation correlates negatively with Communication/closeness and Mutual acceptance-understanding attachment dimensions.

ANOVA analyses were performed in order to determine the presence of differences between gender in both attachment to parents and emotion regulation (Table 4, and Table 5.)

Table 4. Attachment to parents (gender differences)

	Boys (N=76)		Girls (N=109)	
	Mean	**(DP)**	**Mean**	**(DP)**
Communication & closeness	48.93**	(10.83)	44.91**	(14.80)
Mutual acceptance/understanding	n.s.	n.s.	n.s.	n.s.
Alienation	17.64**	(5.14)	20.05**	(6.15)
IPPA-R Total	75.59**	(13.71)	70.10**	(18.32)

** $p < 0.05$

Table 5. Emotion regulation (gender differences)

	Boys (N=76)		Girls (N=109)	
	Mean	**(DP)**	**Mean**	**(DP)**
Functional-external	13.29**	(4.03)	14.50**	(3.65)
Dysfunctional-internal	14.87**	(3.81)	16.62**	(4.09)
Dysfunctional-external	n.s.	n.s.	n.s.	n.s.
Functional-internal	22.55**	(3.55)	21.03**	(4.47)

** $p < 0.05$

Girls reported lower communication /closeness and higher alienation to parents than boys; and higher scores in reported dysfunctional emotional regulation strategies, but higher scores in functional-external emotion regulation strategies.

Linear regression analyses were done to determine the effect of attachment to parents in reported emotion regulation strategies. Data suggest that 5.2% of *Functional-external* ER variance is explain by *Communication/Closeness* attachment dimension; and 4.2% of *Functional-internal* ER is explained by *Mutual acceptance/understanding* attachment dimension; 18.7% of *Dysfunctional-internal* ER is explained by *Alienation* attachment dimension, and 8.7% of *Dysfunctional-external* ER is explained by Alienation attachment.

3.3. Conclusions

The Portuguese version of *Emotion Regulation Questionnaire-2* has adequate psychometric properties, suggesting that it is an adequate instrument to assess emotion self-regulation strategies. The present study – of relations between emotion regulation strategies and attachment to parents in Portuguese adolescents – seems to reinforce theoretical stances that attachment to parents (along development) is a significative and influent variable in the development of adequate development. Data present is quite exciting – although more studies are needed in order to explore those developmental variables. The gender differences presented (namely the lower scores in Communication, and higher in Alienation reported by girls) need more research. Our hypothesis is that adolescent girls may be more "in tension" with mothers in this life period (assuming that they were thinking about mother figure when responding to IPPA-R – according previous studies with Portuguese young adolescents).

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DEVELOPING A QUANTITATIVE TEST OF
MILD COGNITIVE DEFICIT IN INDIVIDUALS

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Abstract

The ability to quantify a developing memory deficit in individuals is paramount. In conditions such as Alzheimer's Disease, early detection has significant implications both for the quality and outcome of treatment, and also for our further understanding of the disease at early stages for future patients' benefit. Quantification of deficit also has implications for a range of scenarios where its assessment is important in judging a patient's well-being and suitability for further treatment. There are known difficulties with the tests currently in use. Many, such as the Mini-Mental State examination (MMSE) are relatively insensitive, and generally are only applied when serious deficit is already apparent. Further, many tests do not provide quantitative measurement at a grain of analysis suitable for tracking incremental changes in performance over time. Finally, most tests struggle to differentiate in measuring individual performance between deficits associated with learning impairment and those associated with increased rates of forgetting. We therefore argue that new tests are required that are better suited to this purpose. In this paper we report our ongoing efforts to exploit a new theoretical development, to develop a new test (the Warhol Test) that has the potential to meet this requirement.

Keywords: Mild Cognitive Deficit, Individual assessment, Warhol Test.

1. Introduction

The ability to quantify a developing memory deficit in individuals is paramount. In conditions such as Alzheimer's Disease, early detection has significant implications both for the quality and outcome of treatment for those patients identified, and also for our further understanding of the disease at early stages for future patients' benefit. Quantification of memory deficit also has implications for a range of medical scenarios as widely separated as open heart surgery and sleep apnoia; where its assessment is both important in judging a patient's well-being as well as the suitability of further treatment. Such tests will also have value for those experiencing anxiety simply as a result of normal age-related decline (see Bishop, Lu & Yanker 2010). There are known difficulties with the tests currently in use. Many, such as the Mini-Mental State examination (MMSE; Folstein et al 1975) are relatively insensitive, and generally are only applied when serious deficit is already apparent. Their ability to detect mild cognitive impairment which characterizes the early stages of serious conditions such as Alzheimer's (e.g. Fleisher et al 2007), is limited, and this renders the test more as confirmatory than diagnostic. Further, many tests do not provide quantitative measurement at a grain of analysis suitable for tracking incremental changes in performance over time in a series of observations. Finally, from a psychological point of view, most tests struggle to differentiate in measuring individual performance between deficits associated with learning impairment and those associated with increased rates of forgetting. We therefore argue that new tests are required that are better suited to this purpose.

2. Background - The Population Dilution Model

Here, we report our ongoing efforts to exploit a new theoretical development, previously reported by Lansdale and Baguley (2008), that has the potential to meet this requirement. This theory looks at memory not as a simple repository of facts, but as a population of discrete representations that preserve both basic information about the stimulus and also the historical sequence by which that information was acquired. The population may also include erroneous representations. Learning is therefore represented in this theory in terms of how numerous this population is and the accuracy of the discrete representations that comprise it. Forgetting is modeled as a process in which that population is diluted by non-functional representations at a constant-rate in time. Space limitations preclude more detailed description of this theory here, but its key facility, as realized in the Warhol test (described below), is that it enables the independent assessment of learning and forgetting rates in individuals in a simple task which monitors the ability to learn the sequence of common objects in an everyday setting.

3. The Warhol Test

The Warhol Test is so-named because the memory stimuli are familiar food cans; alluding to Warhol's famous painting. Participants are a shown a row of 16 cans on a shelf for a fixed period; currently set at 15 seconds. After a short delay filled with tasks to suppress rehearsal, participants are given a sequence of trials. In each of these, 4 cans are shown and the participant is required to specify the relative order in which they appeared in the stimulus sequence. Over 20 such trials, it is possible to contrive a sequence of trials in which each can has been tested against every other can in the stimulus just once. Following a delay of 2 minutes, this sequence of stimulus presentation and test was repeated 3 more times to allow an assessment of the build-up of learning. Then, after 7 days, participants are unexpectedly tested in the same way, but without seeing the stimulus.

4. Estimating Learning and Forgetting Rates from an individual

This procedure basically tests whether the patient can remember whether two cans X and Y appeared in the sequence X-Y or Y-X. This binary judgment is made on four occasions and leads to 16 possible patterns of correctness over the four testing cycles from all incorrect (eeee) to all correct (cccc) with 14 other possible combinations (e.g. ecce). With 16 cans in the sequence, there are 120 such comparisons distributed across these 16 possible learning patterns. Given the putative probability of learning a particular sequence on any given presentation, L, and taking into account the possibility of correct guesses, a complex but relatively straightforward mathematical model can predict the distribution of the 120 comparisons between the 16 possible learning patterns. As a result, given such an observed distribution, we can estimate a learning rate L for that patient using standard parameter optimization methods.

Forgetting is estimated in a similar way. Within the learning model is the ability to estimate, for any learning pattern, a population of traces of total sum (C+E), where C represents the number of traces that encode the correct sequence and E the number that are in error. At elapsed time t, the Population Dilution model predicts the probability of accurate recall to be $C/(C+E+Ft)$; where F is the rate with which the population is diluted by blank traces as a function of unit time. The probability of correct recall tracks the proportion of accurate traces in the increasing population volume. Consequently, for a given value of F, we can predict the proportion of any specific learning patterns observed (e.g. ecce) that will produce a correct response after a given delay and we can estimate F from those proportions actually observed. Readers should be reassured that, with 120 comparisons distributed between 16 possible

learning patterns, and each producing an observed probability of recall after delay, the estimation of the two free parameters L and F is far from over-prescribed and that all datasets thus far tested have produced satisfactory goodness-of-fit for the degrees of freedom so defined. The mathematical models underlying the Warhol test are both parsimonious and statistically sufficient.

5. Warhol results across the life span

52 participants aged from 18 yrs to 78 yrs were tested in this way. They were screened for health issues and matched for educational attainment. Overall, the relationship between age and cognitive performance is as might be expected. That is, a small positive correlation with increasing age and forgetting rate is observed (Pearson's PM=0.134); as is a similar negative correlation with learning rate (Pearson's PM= -0.267). More to the point, what is striking is the intrinsic variability between individuals; as illustrated in Figures 1 and 2 for learning and forgetting rates respectively, where each point represents the estimated rate for an individual. The variance associated with age is of second order in comparison to the differences between individuals of comparable age. Overall, this work endorses the findings of Peterson et al (1992) that learning rates decline uniformly as a function of age whereas forgetting rates remain broadly stable when levels of initial learning have been taken into account. However, what this study reveals further is how significant the appraisal of individual differences is to the interpretation of that finding.

Figure 1. Estimated L as a function of age

Figure 2. Estimated F as a function of age
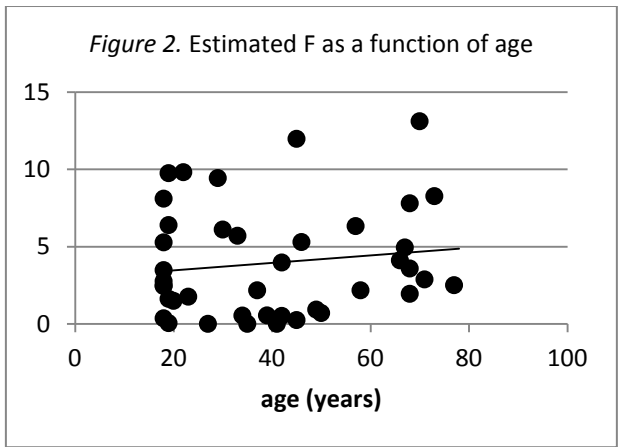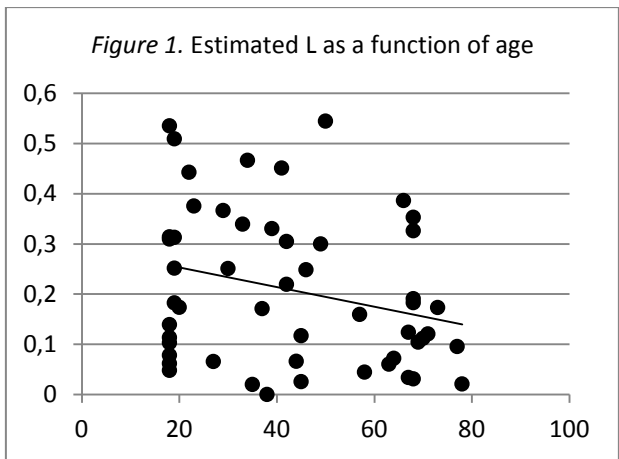
How noisy is the Warhol Test?
Given that parameter optimization takes place in the context of a task that allows for guessing, some noise must be expected in the estimates derived thereby

and it is possible that this is reflected in Figure 1. It is therefore necessary to establish that the wide variation observed in Figures 1 and 2 is genuinely attributable to individual differences between participants. To evaluate this, we developed an extensive Monte Carlo simulation in which 250 pseudo-subjects were simulated repeatedly with different, and known, values of *L* and *F*. The data output from that simulation was then reoptimized for estimates of *L* and *F* in order to evaluate the variability intrinsic to the Warhol test by comparing how closely the reoptimized values approximated to the original input values. For *L*, this reveals a mean deviation of 0.031 from the true value with a standard deviation of 0.057. In essence, this means that individuals differing by more than 0.114 can be assumed to be performing at significantly different levels. Most of the variations we observe in Figure 1 reflect genuine performance differences between participants rather than the outcome of chance.

The equivalent calculation of *F* is rather more involved because, as a reciprocal element in the basic model (pr=C/(C+E+ *F*t)), the deviations from the expected value are heavily skewed towards overestimation. Further, when learning levels are low, smaller degrees of noise will drive the optimization falsely to boundary conditions (i.e. estimating *F* as 0 or infinity). This is because with very little learning, it is impossible to tell the difference between very high and very low levels of forgetting because they appear identical. Nevertheless, it has proven possible[*] to demonstrate that the levels of forgetting observed between different participants do genuinely reflect different levels of performance. We can be reasonably confident that these individual differences reflect significant differences in performance.

6. Practical Clinical Utility

Because the test is aimed at detecting mild cognitive impairment, it is by necessity more complex than tests such as MMSE. It is therefore important to establish its practical application in a quasi-clinical setting before starting clinical trials. We therefore administered the test to 17 long-standing volunteer patients of the Leicester General Hospital Sleep Clinic, all having received treatment for sleep apnoea (SA) for a minimum of 12 months and of average age 65.8 yrs and whose condition can be said to have stabilized. Other than commenting that the results were comparable to age-matched participants (implying a successful treatment outcome given the self-report of new patients), we do not elaborate on that study here. However, in this study, participants also undertook an additional short qualitative interview to examine the test complexity and the patient's attitudes towards it and its outcome in a clinical setting. This revealed no significant usability issues in the test; nor in the participant's inclination to take part in it. We do note, however, that because the test is necessarily challenging, it requires reasonably sensitive and skilled administrators to explain to the participants why this is necessarily the case and to maintain the patients cooperation and effort in undertaking it.

7. Summary and Future Directions

We have concentrated here upon the development of a test. Theoretical issues arising from this research are reported elsewhere. To date, we have: a) carried out an initial survey of performance in this test over the life span; b) developed techniques to establish the confidence levels in the results this provides; c) we have established the practical usability of the test in a clinical setting; d) have identified conditions and performance levels where the test is problematic to interpret; and, e) have demonstrated very high levels of individual difference between participants carrying out

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[*] In a paper such as this, space limitations preclude detailed exposition of complex issues. Interested readers are welcome to contact the authors at *ml195@le.ac.uk* for further details if required.

the test. We do not underestimate the technical difficulty of developing tests in this domain, where the reliable detection and quantification of mild cognitive deficit is a significant challenge. We are therefore happy to discuss the work that remains to be done.

First, alongside the work previously described to establish confidence limits, a sufficiently large sample for each age group is required to establish normative levels within which the population at large can be expected to fall and against which individuals can be compared. Figure 3 illustrates the values of *L* and *F* for 88 participants of ages 18-24. This shows a) a general decline in forgetting rates with higher learning rates (a robust finding of some ongoing theoretical interest beyond the scope of the present paper); b) substantial individual differences, as before, in both rates of learning and forgetting; but c) evidence of at least one participant (circled) whose forgetting rate is sufficiently high in comparison to the estimated learning rate to enable us to identify this as an outlier requiring further consideration. Second, it is important to establish the test-retest reliability of this test as a precursor to longitudinal studies. At the time of writing, experiments are currently in progress to evaluate the degree to which the individual differences observed to date are preserved from one observation to the next. Third, and finally, we are planning a clinical trial of the test in a domain where mild cognitive impairment is to be expected; in this case in patients presenting for the first time to the Sleep Apnoea Clinic at Leicester whose self-report and overt symptoms point towards mild to significant cognitive deficit (albeit usually reversible). These will be tested upon arrival and studied longitudinally over the onset of treatment. Such a trial will act both as a proof-of-concept (insofar as cognitive deficit is actually detectable in this group) and should also provide to the clinicians further information as to the degree and speed of recovery as a function of treatment.

Figure 3. Learning and forgetting rates (88 individuals aged 18-24)
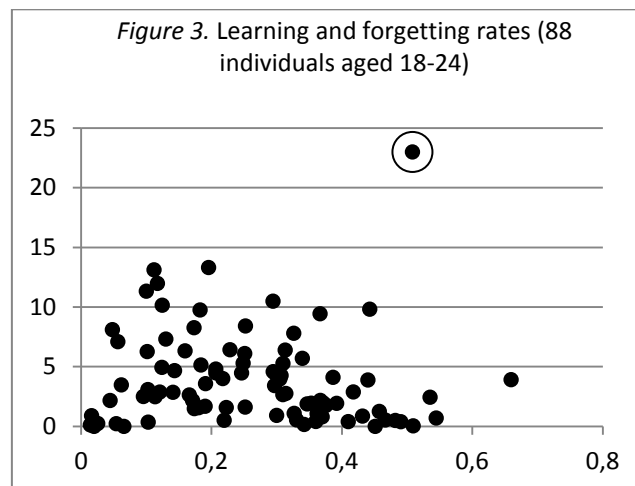
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OBJECTS IN ACTION: THE ROLE OF FUNCTIONAL, MANIPULATIVE AND SPATIAL INFORMATION IN ACTION UNDERSTANDING

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Abstract

Considerable evidence suggests that the functional, manipulative, and spatial knowledge about objects involve in the understanding of an observed action. However, whether action representation can be activated by the above information when they are irrelevant to the current judgment remains unclear. The present study focused on this issue. Correctness of various action-related informational aspects such as a) the functional relation between the two objects, b) the grip applied to the objects, and c) the orientation of the objects were manipulated independently. In three experiments, participants had to evaluate only the correctness of one of the three aspects (i.e. function, grip or orientation). These experiments got similar results. Incorrect irrelevant dimension interfered with making decisions about the relevant dimension, whereas the judgments of incorrect relevant dimension were facilitated when irrelevant dimensions were both incorrect. These results clearly indicate that action representation can be activated by task-irrelevant action information when the observed actions and stored action representations partially matches.

Keywords: Action understanding, Action representation, Automatic activation.

1. Introduction

Numerous studies have showed several sources of information contribute to action understanding, including the object functional properties that is what to do with an object (e.g., Bach, Knoblich, Gunter, Friederici, & Prinz, 2005; Borghi, Flumini, Natraj, & Wheaton, 2012), manipulative feature that is how the object is grasped (e.g., Van Elk, van Schie, & Bekkering, 2008), or the spatial relationship that is required for the actions to succeed (e.g., Bach et al., 2005; Riddoch, Pippard, Booth, Rickell, Summers, Brownson, & Humphreys, 2011). The mirror neurons (MNs), which are 'tuned' to visually represented information about actions, would become automatically activated whenever a match occurs (Rizzolatti, Fogassi, & Gallese, 2001).

An intriguing question is whether these features can subserve us to understand others' actions when they are irrelevant to current judgments. However, this hypothesis doesn't address the case that partially matching between the observed actions and stored action representations. Some studies focused on this issue by investigating that whether the action representation could be activated by task-irrelevant information. For example, Bach et al. (2005) required participants to judge to the spatial match between a tool and a target object, and found spatial relation was judged faster when instrument and target object were functionally related, even in the condition of spatial mismatches. When judging the functional match between a tool and a target object, irrelevant spatial matches only facilitated the judgment of functional matches. In another study, van Elk et al. (2008) found correct irrelevant location of object was the facilitated the judgments about the correctness of grip only when grip was correct. Same results were obtained that correct irrelevant grip facilitated the judgments about the correctness of location only when location was correct.

Thereby, it seemed action representation is activated only when the attended relevant action feature is consistent with the stored action knowledge, or in case the functional relation acted as irrelevant information. Yet some issues were worthy of note in previous works. Firstly, in the study of Bach et al. (2005), the objects were always held by a hand. However, some researches manifested that the irrelevant grip could activate action representation (e.g., Borghi et al. 2012). Thus, when judging the functional mismatches, the action representation probably had been activated by the irrelevant manipulative information. Secondly, in the experiment of van Elk et al. (2008), the presented actions were special where correct location corresponded to correct function, and incorrect location corresponded to incorrect function. Bach et al. (2005) found irrelevant functional information facilitated the judgments of spatial mismatches (Experiment 1). However, there were no facilitation effects of irrelevant location (function) dimension when participants judged the incorrect grip. One possibility of this disparity might be that the facilitation of functional information was decreased by an interaction between function and location. Thirdly, in the study of van Elk et al. (2008), when judging the correctness of orientation, participants were required to decide "whether the goal location at which the actor held the object allowed the functional use of the object". Attending to two dimensions probably resulted in the reduction of attention resources on the irrelevant information.

Due to the potentially influential factors mentioned above, it is necessary to re-explore the activation of action representation triggered by irrelevant information through manipulating functional, manipulative and spatial relations independently. In the present study, these three factors were manipulated respectively in three experiments. In Experiment 1, participants were required to judge the correctness of an observed action by function, where the grip and orientation acted as irrelevant information. In Experiment 2, participants were required to judge the correctness of an observed action by grip, in which the function and orientation of the objects acted as irrelevant information. In Experiment 3, participants were required to judge the correctness of an observed action by orientation, in which the grip and orientation of the objects acted as irrelevant information. We hypothesized that if action representation could be activated by the irrelevant information, the judgments would be facilitated by the correct irrelevant feature or interfered by the incorrect irrelevant feature, even though the relevant dimension was incorrect.

Figure 1. Examples of stimuli in the Experiments 1-3.
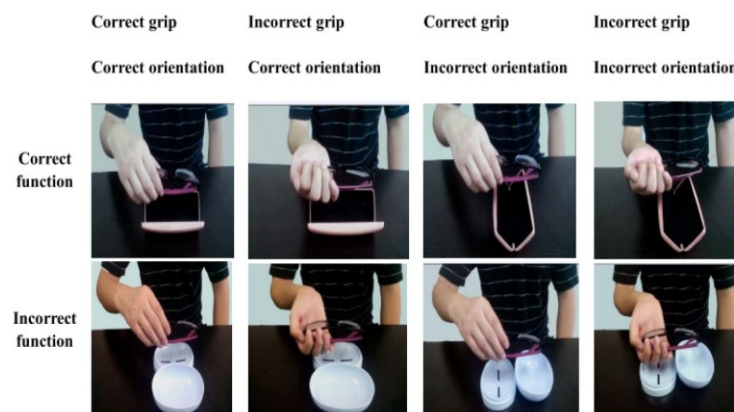
2. Method

2.1. Participants

Sixty students (34 female, 28 male, ages 19-23 years) took part in the experiment. All the participants reported that they were right-handed. All of them were

right-handed and had normal or corrected-to-normal vision. All were naive as to the purposes of the experiment. Participants received an experimental fee for participation.

2.2. Materials and apparatus.

Stimuli were obtained by taking photographs of an actor holding a tool towards a target (see Figure. 1 for examples). In total, 12 different object pairs were used. To assess the role of functional, manipulative and spatial information in action understanding, pictures were classified as representing different actions. In addition, the tools were grasped with the right hand, and left-handed action pictures were obtained by flipping each picture along a vertical axis (Van Elk et al., 2009).Each group action was evaluated in a pre-experimental phase. Pictures were presented on a 19-in. monitor (resolution 1024 × 768 pixels), which were displayed at a viewing distance of 60 cm, resulting in approximately 13 visual degrees.

2.3. Procedure.

Each trial began with the presentation of a cross fixation for 500 ms in the middle of the screen, which was followed by the stimuli. The stimuli remained on the screen until a response had been made. Participants were instructed to press the "A" key with their left index finger for Yes and the "L" key with their right index finger for No on the keyboard. This response mapping was counterbalanced between participants. They were told to ignore other irrelevant information. In addition, participants were instructed to respond as quickly and accurately as possible. The next trial started after an interval of 800 ms. The participants received 24 practice trials before entering the experimental phase, which consisted of 4 blocks of 128 trials each. In the experimental phase, they were allowed to rest for some time between blocks.

3. Results

Figure. 2 showed the RTs in Experiments 1-3. For analysis of reaction times, trials in which the participant made an error and reaction times that exceeded the participant's mean by more than two standard deviations were excluded from analysis. The remaining RTs were entered into a 2 × 2 × 2 repeated measurements ANOVA within-participants factors function (correct, incorrect), grip (correct, incorrect), and orientation (correct, incorrect).

In Experiment 1, the relevant function, irrelevant grip and irrelevant orientation produced a significant three-way interaction, $F (1, 19) = 10.10$, $p < .01$, $\eta^2 = .35$. For the correct function judgments, the ANOVA revealed a main effect for irrelevant grip, $F (1, 19) = 11.83$, $p < .01$, $\eta^2 = .38$. Reaction times were faster with objects being griped correctly (757 ms) than they were griped in correctly (778 ms). There was also a main effect of irrelevant orientation, $F (1, 19) = 15.06$, $p < .01$, $\eta^2 = .44$. Participants responded faster in the condition of objects with correct orientation (747 ms) compared with incorrect orientation (788 ms). The interaction between irrelevant grip and irrelevant orientation did not reach significance, $F (1, 19) = .41$, $p = .53$, $\eta^2 = .02$. For the incorrect functional judgments, no main effect for irrelevant orientation was found, $F (1, 19) = .58$, $p = .46$, $\eta^2 = .03$. The main effect for irrelevant grip approached significance, $F (1, 19) = 4.00$, $p = .06$, $\eta^2 = .17$, which significantly interacted with irrelevant orientation, $F (1, 19) = 13.37$, $p < .01$, $\eta^2 = .45$. When the grip applied to the object was correct, responses were faster when orientation was correct (756 ms) compared with that was incorrect (797 ms), $t (19) = 3.17$, $p < .01$. Conversely, while the grip applied to the object was incorrect, actions were judged slower as being oriented correctly (787 ms) than being oriented incorrectly (734 ms), $t (19) = 3.54$, $p < .01$.

In Experiment 2, There was a significant interaction between the relevant grip, irrelevant function and irrelevant orientation, $F (1, 19) = 11.14$, $p < .01$, $\eta^2 = .37$. For the correct grip judgments, there was a significant main effect for irrelevant function, $F (1, 19) = 8.53$, $p < .01$, $\eta^2 = .31$. Responses were faster with objects being functionally

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correct (795 ms) than being functionally incorrect (819 ms). There was also a main effect of irrelevant orientation, F (1, 19) = 4.50, p < .05, η^2 =.19, reflecting slower responses to incorrect orientation (819ms) compared with correct orientation (795 ms). The interaction between irrelevant function and irrelevant orientation did not reach significance, F (1, 19) = .23, p = .64, η^2 = .01. For the incorrect grip judgments, no main effect for irrelevant function was found, F (1, 19) = .81, p = .38, η^2 = .04. There was a main effect for irrelevant orientation, F (1, 19) = 5.65, p < .05, η^2 =.23, which was further qualified by an interaction of irrelevant function and irrelevant orientation, F (1, 19) = 18.34, p < .001, η^2 =.49. When the function was correct, responses were faster in judging correct orientation (783 ms) than judging incorrect orientation (813 ms), t (19) =2.19, p < .05. However, when the function was incorrect, actions were judged slower when they were oriented correctly (840 ms) than when they were oriented incorrectly (777 ms), t (19) =5.11, p < .001.

Figure. 2 The mean Reaction times with standard errors in Experiments 1-3. F = Function; G = Grip; O = Orientation；C = Correct; I= Incorrect.
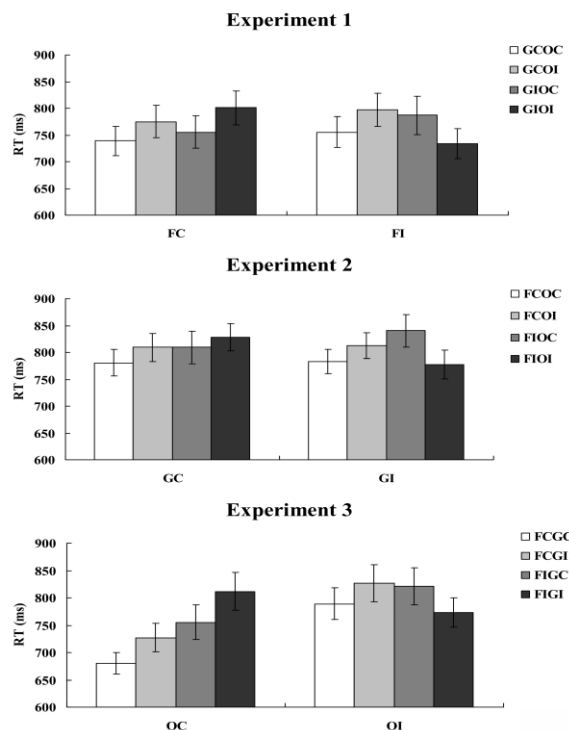
In Experiment 3, the interaction between relevant orientation, irrelevant function and irrelevant grip reached significance, F (1, 19) = 7.90, p < .05, η^2 = .29. For the correct orientation judgments, a main effect for irrelevant function was obtained, F (1, 19) = 30.58, p < .001, η^2 =.62. Participants responded faster in judging correct function (704 ms) than judging incorrect function (784 ms). There was also a main effect of irrelevant grip, F (1, 19) = 32.95, p < .001, η^2 =.64. Judgments were slower when the objects were griped incorrectly (770 ms) compared with when they were griped correctly (718 ms). The interaction between irrelevant function and irrelevant grip did not reach significance, F (1, 19) = .29, p = .60, η^2 = .02. For the incorrect orientation judgments, no main effect for irrelevant function, F (1, 19) = .66, p = .43, η^2 = .03, and irrelevant grip, F (1, 19) = .53, p = .47, η^2 =.03, were found. The interaction of irrelevant function and irrelevant grip reached significance, F (1, 19) = 7.25, p < .05, η^2 =.28. When the function was correct, responses were faster in judging correct grip (789 ms) than judging incorrect grip (826 ms), t (19) =2.57, p < .05. While the function was

incorrect, actions were judged slower when the objects were griped correctly (821ms) compared with when they were griped incorrectly (773 ms), t (19) =2.39, p < .05.

The pattern of errors generally mirrored the RT data, and was not exhaustively reported here.

4. Discussion

We presented participants with pictures of object pairs and manipulated the correctness of various action-related informational aspects such as a) the functional relation between the two objects, b) the grip applied to the objects, and c) the orientation of the objects. Participants were asked to selectively attend to one specific action feature (i.e. function, grip or orientation). When the relevant action dimension was correct an additive effect of observing incorrect irrelevant action information was reflected in slower reaction times. In contrast, when the relevant information was incorrect, an interference effects was observed only when one irrelevant dimension was incorrect, but when both dimensions were incorrect, judgments were facilitated. The interference effects of irrelevant information indicated that participants used the irrelevant feature to access the respective action representation to gain knowledge about relevant action feature, then, the given relevant relation was compared. Therefore, when the observed actions and stored action representations were partially matched, action representations could be activated by the irrelevant action aspects.

5. Conclusion

These results indicated that the action representation could be activated whenever some aspect of action knowledge associated with the object was retrieved.

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MORPHOLOGICAL SHAPE ANALYSIS OF CHILDREN'S ACTIVELY GENERATED VIEWPOINTS

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Abstract

Our visual system develops in a world of three-dimensional objects, where the dynamic visual experience of objects is often under the child's active control. Previous experimental work by some of us was the first to analyze in detail what kind of object views are selected in children's unconstrained manipulation of physical objects (Pereira, James, Jones, & Smith, 2010). The key finding was the distribution of dwell time across all possible viewpoints: preferred viewpoints are around on-axis views, where the principal axis of elongation is either perpendicular or parallel to the line of sight and flat surfaces are presented approximately perpendicular to the line of sight – so called planar views.

Here we present a morphological shape analysis of the object views selected by a cross-sectional sample of children that manipulated objects in the Pereira et al. (2010) study (N = 54, 12-36 months). We followed an image-based (pixel-based) approach; we coded 3D object orientation and created computer-generated images of the object; finally, we extracted two shape measures from the generated images. In particular we computed surface area and aspect ratio. For the main analysis we investigated if the shape measures differ between planar and non-planar views. In addition, and for a smaller subset of 30-36 month olds (N = 8) we computed the number of pixels that do not overlap between consecutive frames (a measure of image variability).

There were two key results: (1) on average, planar views have lower surface area (only in the oldest age groups), and aspect ratio increased with developmental age; and (2) on average, consecutive frames of planar views have a lower proportion of pixels that do not overlap, compared with non planar views. We discuss these results in the context of their contribution to our understanding of the development of visual object perception.

Keywords: Object recognition, Perceptual development, Perception and action, Visual development, Active object inspection.

1. Introduction

Children influence what they see as they move their eyes, their head, their body, and as they manually explore and act on objects. Manipulating an object – a privileged form of visual stimulation – is an opportunity to perceive changes to the visual image contingent on self-generated movements. Underscoring the importance of active visual learning, object pose under active control is highly biased: adults and children commonly select or prefer certain views and do so far from chance selection.

Recent work has analysed children's self-generated object views as they manipulate objects (James, K.H., Jones, Swain, Pereira, & Smith, in press; Pereira et al., 2010). The first study, Pereira et al. (2010), was a cross-sectional study of 12 to 36 month old children that examined two structural and important aspects of visual object learning: (1) which views children prefer over others, and (2) how often objects were in an upright position. Participants explored objects in a free-play task and 3D orientation

was measured. Analysis of dwell time across all possible object views revealed significant developmental changes in the structure of children's active viewing; the first was an increasing bias for planar views – an object pose where the main axis of elongation is, approximately, either orthogonal or parallel to the line of sight and flat surfaces are also presented approximately orthogonal to the line of sight (Harman, Humphrey, & Goodale, 1999; Perrett & Harries, 1988). The second structural property concerns how the object is held in respect to its upright position – 30 to 36 month olds are biased towards views that present the object in an upright position.

The planar bias in particular emerges developmentally early (measurable in the 12 to 18 month old age group) and increases in strength until 36 months (Pereira et al., 2010). This effect is well-documented in the adult literature and has been replicated across stimulus and tasks (see Pereira et al. (2010) for a discussion) and critically, one study suggests it promotes more efficient visual object learning (James, K. H., Humphrey, & Goodale, 2001). These findings show that active perceivers, even very young children, constrain the problem of visual object learning with specific viewing biases but these also change considerably early in development. The functional role of the planar bias is still poorly understood and we known little about the properties that distinguish preferred viewpoints from other object views.

We present here the findings of a pixel-based morphological shape analysis of the Pereira et al. (2010) study's data. We examined if planar views differ in terms of surface area and aspect ratio from non-planar views, and if the exploration around planar views is more stable by measuring the difference between consecutive frames.

2. Study 1: Image-based analysis of actively selected viewpoints

2.1 Participants
Children aged 12 to 36 months participated in the Pereira et al. (2010) study. Participants were divided in four age groups: 12 to 18 months (N = 14); 18 to 24 months (N = 14); 24 to 30 months (N = 14); and 30 to 36 months (N = 12).

2.2. Procedure
For the Pereira et al. (2010) study, children came to the laboratory for a free object play task. Participants manipulated objects, one at a time, and without a supporting surface, while wearing a lightweight mini head-mounted camera, low on the forehead and calibrated so the object would be in the center of the image. During this developmental period, and particularly in a context of object manipulation, eye and head directions are typically aligned (Yoshida & Smith, 2008), and thus the head-mounted camera method can be used to capture the child's self-generated object views. The stimulus set was composed of objects from eight common object-based categories in two levels of shape detail (16 objects in total); subjects saw one object per category.

Object orientation was coded at 1Hz using a custom-made software application that allowed a human coder to observe a video frame from the mini camera and manipulate a 3D model of the object until it matched the image – the model's 3D orientation was recorded as the estimate of the child's view. An object view was coded as planar view if the angle between the line of sight and the normal vector of the object's bounding box was zero (with a tolerance of ±11.25 degrees, see **Erro! A origem da referência não foi encontrada.** left panel). Complete details on stimuli, the experimental procedure (including the calibration of the head mounted camera) and the 3D orientation coding can be found in Pereira et al. (2010).

The 3D orientation data from the previous cross-sectional study was the basis for the present study. Using the 3D models and the orientation data, the manipulations were reconstructed by rendering one image per coded head-mounted camera video frame: 12 to 18 months (N = 1891 frames); 18 to 24 months (N = 1680 frames); 24 to 30 months (N = 1803 frames); and 30 to 36 months (N = 2421 frames). The images

were further processed using Matlab in two steps: first, they were binarized – all object pixels were considered on and all background pixels were considered off; and second, the function *regionprops* was used to compute the object blob image properties (see **Erro! A origem da referência não foi encontrada.** right panel). We examined two measures, total surface area (provided by *regionprops*) and aspect ratio. The later was expressed as the aspect ratio of the ellipse with the same normalized second central moments of the image blob (an output of *regionprops*), calculated by dividing the ellipse's major axis length by the ellipse's minor axis length – an aspect ratio of 1 is a circle; the larger the aspect ratio, the more elongated the ellipse. The total surface area was normalized using the maximum object-specific area present in the dataset, and the aspect ratio was range normalized (subtracting the minimum value and dividing by the object-specific aspect ratio range).

Figure 1. (left panel) Planar view definition: a view was considered planar if the normal vector of object's bounding box made an angle of 0°±11.25° with the line of sight – in the example, LoS_1 corresponds to a planar view and LoS_2 to a non-planar view. (right panel) An example of a sequence of object views generated by a child and reconstructed using computer renderings of the objects; the bottom row shows the rendered frame in binary format.

In addition, we also recoded a sub-set of the data at a higher sampling rate (10Hz) in order to be able to compute a measure of image stability. Only N = 8 participants, randomly selected from the oldest age group, were coded, for a total of 14446 frames. The number of pixels that don't overlap between consecutive frames was calculated and normalized by the maximum surface area in pixels per object.

2.3. Results

Children were free to manipulate the objects for as long as they wished and older children spent more time inspecting objects than younger children. The mean holding times per age group were, in increasing age period: 15.4, 22.0, 27.5, and 34.7 seconds respectively.

The first analysis consisted of fitting the normalized surface area and the range normalized aspect ratio data with a 4 *AgeGroup* x 2 *ViewType*(planar/non-planar) multivariate general linear model, with both measures entered as dependent variables, and *AgeGroup* and *ViewType* entered as between-subjects factors. Post-hoc analysis was conducted by examining all 2-way pairwise comparisons using Sidak correction. **Erro! A origem da referência não foi encontrada.** shows the observed sample cell means for this design.

This analysis yielded a main effect of *ViewType* for normalized surface area, $F(1, 7787) = 15.77$, $p < .001$, and a main effect of *AgeGroup* for range normalized aspect ratio, $F(3, 7787) = 7.21$, $p < .001$; all other effects were non-significant ($p > .05$). On average, actively selected object viewpoints close to a planar view corresponded to a lower object surface than non-planar views (**Erro! A origem da referência não foi encontrada.** left panel). Post-hoc comparisons revealed this difference was only significant in the two older age groups. For the aspect ratio measure there were no average differences between planar and non-planar views across all age groups; however, there was a general increase over age for this measure – older children chose more elongated views (**Erro! A origem da referência não foi encontrada.** middle panel). Only the difference between the 30-36 months and the 12-18 months or the 24-30 months age groups was significant, according to the post-hoc comparisons.

The normalized pixel difference measure revealed that – at least for the oldest developmental age period where we computed this measure – planar views correspond to moments where the pixel difference between frames is considerably lower that the rest of the object manipulation, $t(3032.2) = 14.37$, $p < .001$, for unequal variances (**Erro! A origem da referência não foi encontrada.** right panel) – i.e. exploration around planar views corresponds to moments where the image was more stable.

Figure 2. Study 1's results. Sample average values, per age group, for normalized surface area (left panel) and range normalized aspect ratio (middle panel). Solely for the oldest age group, 30 to 36 months, the right panel shows the normalized pixel difference between frames. Data is shown for planar and non-planar views; error bars mark 2 ± SEM; and the asterisk marks a significant post-hoc comparison ($p < .05$)
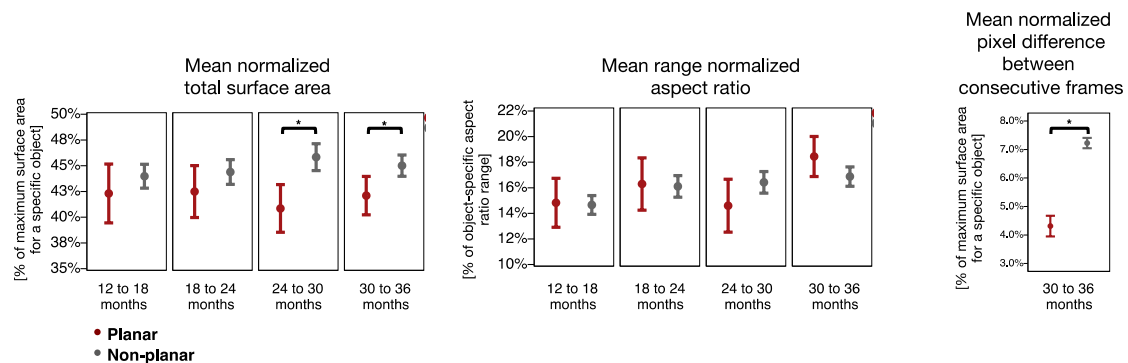
3. Discussion

Children actively co-construct the natural statistics of their own visual experience of objects during a long period of object exploration – and thus shape the development of the visual system in important ways (Smith & Pereira, 2009). The presence of biases in active visual learning, and in particular the planar bias discussed here (a bias in the sampling of object viewpoints), suggests the presence of visual learning mechanisms at work and may contribute to understanding the molar features of shape used by the visual system. Consistent with this hypothesis, our previous study found the planar bias to be developmentally early but also to increase in strength considerably (Pereira et al., 2010).

Here we investigated if the planar viewpoints, selected by children during object manipulation, differ in terms of two basic static shape properties, from non-planar object views. We measured total surface area and aspect ratio (a measure of elongation); the planar bias is about orienting surfaces so they are approximately orthogonal to the line of sight, and thus these two measures were relevant in testing if simple differences in the characteristics of the surfaces in view would explain the planar bias. In addition, and because one hypothesis for the planar bias' functional role is the exploration of viewpoint instabilities (James, K. H. et al., 2001; Pereira et al., 2010) – rotations around planar viewpoints typically generate larger changes in the available object information than around non-planar viewpoints – we also investigated a measure of image stability: pixel difference between frames (this measure only for a subset of the oldest age group).

The results, using a stimulus set designed to sample widely from common object shapes, show that planar views do differ in surface area but they correspond to object views with less visible surface. This difference is, however, not present early on (only children older than 24 months show this difference) which stands in contrast with the planar bias that can be observed in the earliest age group tested so far (12 to 18 months). A simple explanation of the visual bias based on expansion of surfaces seems unlikely. One possibility, nevertheless, is that younger children – with a weaker planar view bias (there is a 1.5 fold increase in the proportion of planar views between the youngest and oldest age group in the Pereira et al. (2010) study) – orient objects

less precisely and thus generate planar views that are more similar to non-planar views. The surface area finding is also relevant because it supports another important contrast, one linking visual object learning and visual object recognition. Canonical views in recognition are typically not planar (the main axis of elongation is oblique) and show multiple sides; active perceivers, nevertheless, prefer views that are of intermediate levels of complexity (they show only one side of the object).

Regarding aspect ratio, although planar viewpoints require the alignment of the main axis of elongation (and therefore one might predict more elongated views), the elongation is not reliably present in planar views, although there is an increase in aspect ratio with developmental age. Additional studies are needed, with stimuli specifically designed to test this property.

The finding on dynamic viewing around planar views, regarding the oldest age group, is an important novel result. The lower pixel difference between frames around planar views means they correspond to more stable periods of the object manipulation, in opposition to initial conjectures associating the planar bias with higher instabilities (caused by movements of exploring planar viewpoints). This result suggests that sampling planar views corresponds to moments of focused attention to a particular view, where perhaps learning of a static view is occurring. However, it is still possible that participants explored more finely the planar views (and thus generated purposeful movements around those views) and this produced the observed difference. Further work is required to elucidate the detailed nature of the motor movements involved. Critically, the present results and approach leave open the question of how view transitions are integrated over time.

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THE FACILITATIVE CUES IN LEARNING COMPLEX RECURSIVE STRUCTURES

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Abstract

The learnability of center-embedded recursion has been proposed to be crucial in distinguishing humans from non-humans (Hauser, Chomsky, & Fitch, 2002; Fitch & Hauser, 2004). It has played an important role in both psycholinguistic empirical researches about language acquisition, and also theoretical debates from philosophy, biology and computer science about learning complex structures. Previous studies have shown that center-embedded recursion is notoriously difficult to process (Lai & Poletiek, 2011).

The purpose of the current project is to investigate the facilitative cues in mastering the complex recursive structures. In an experiment with artificial grammar learning paradigm, we presented our adult participants with a certain number of nonsense artificial strings, which were composed according to an underlying center-embedded recursive rule. After the learning phase, participants were presented with novel strings composed according to the same rule. Participants were required to perform a grammaticality-judgment task. We manipulated different aspects of the learning input, in order to investigate the influence in participants' processing of center-embedded structure. The results showed that participants were significantly assisted by the statistical cues of the learning input.

Keywords: Recursion, Language acquisition, Statistical information, Artificial grammar learning, Statistical learning.

"My name is Yon Yonson,
I come from Wisconsin
I work in a lumber mill there
All the people I meet
As I walk down the street
Ask me how in the heck I got there
So I tell them: My name is Yon Yonson
I come from Wisconsin..."

---- by Vonnegut (1969), a recursive poem in one of the greatest novel of the 20th century

1. Introduction

Recursion is an operating system, which is able to generate an infinite number of expressions by operating a finite number of rules (Chomsky, 1957; Hauser, Chomsky, & Fitch, 2002). Recursion enables human beings to produce innumerous sentences (Corballis, 2007). The importance of recursion has evoked an immense large amount of researches across domains, such as behavioral studies (Gentner, Fenn, Margoliash, & Nusbaum, 2006; Hauser et al., 2002; Lai & Poletiek, 2011; Rey, Perruchet, & Fagot, 2012), neuro-imaging experiments (Bahlmann, Schubotz, & Friederici, 2008; Friederici, Bahlmann, Heim, Schubotz, & Anwander, 2006; Friederici, Makuuchi, & Bahlmann, 2009; Makuuchi, Bahlmann, Anwander, & Friederici, 2009;

Petersson, 2005), as well as genetic studies (Bishop, 2002; Enard et al., 2002; Fisher, Lai, Hurst, Vargha-Khadem, & Monaco, 2001).

In natural language, recursion occurs in various types, among which center-embedded recursion has been regarded to be a crucial factor distinguishing humans from non-humans (Fitch & Hauser, 2004; Fitch, Hauser, & Chomsky, 2005). Center-embedded recursion is realized by infinitely inserting new embedding in the center of the structure, resulting in a type such as *AABB, AAABBB*, etc. For instance, in the sentence "*The student that the teacher helped smiled*", there is one level of embedding (LoE) inside. However, when there are more than 2LoE, it is even difficult for native speakers to understand (Bach, Brown, & Marslen-Wilson, 1986; Karlsson, 2010). The special structure of this type of recursion results in long-distance dependencies (such as *"the student-smiled"*). It also brings high memory load and computational complexity for processing and understanding.

Previous research has shown various kinds of cues in facilitating the learning of center-embedded recursion (Conway, Ellefson, & Christiansen, 2003; Gomez, 2002; Mintz, 2003). Especially, we observed a "starting small" effect in previous studies (Lai & Poletiek, 2011), which showed that staged input could facilitate the processing of complex center-embedded recursion. When participants received the learning material in an incrementally increasing manner, they performed significantly above chance level in learning; on the contrary, when the learning input was presented in a random order, participants could not learn the structure. Our results were in line with previous findings by Elman (1993). However, the effect of starting small is far from conclusive. For instance, some studies proposed that "starting big" was more helpful than "starting small" (Rohde & Plaut, 1999).

In our previous studies, we presented our learning materials strictly according to their complexity (i.e. 0-LoE, 1-LoE, 2-LoE). However, natural language does not occur ideally in such an incremental ordering. Therefore, the current study is to further investigate the starting small effect deeply: to manipulate the statistical properties of the learning input, in order to simulate the natural language as much as possible.

2. Design

In the present study, we used the artificial grammar learning paradigm (Reber, 1967), which is valuable in investigating the process of language learning. The artificial language is composed by nonsense syllables according to certain rules. The paradigm consists of two phases, i.e. learning and testing. In the learning phase, participants were required to observe a certain number of nonsense sequences. They were informed that these learning items were following an underlying rule. Afterwards, they were tested on new artificial sequences, which are either based on the same underlying rule or not.

3. Method

3.1. Subjects
Ninety adults were recruited from the Netherlands. Each participant was rewarded with 3.5 euro for taking part in the experiment.

3.2. Materials
We applied a center-embedded recursive grammar to generate two sets of artificial sequences, consisting of nonsense syllables, such as *be, bi, po, pu*, etc. There were three categories of complexity, i.e. 0-LoE (with the type of *AB*), 1-LoE (with the type of *AABB*), and also 2-LoE (with the type of *AAABBB*).

3.3. Procedure

In the learning phase, participants sat in front of a computer and exposed to the training material. They were informed that there was an underlying rule. In the test phase, they would be provided with a set of new sequences, and they had to judge whether the new item was grammatical or not according to the rule that they discovered earlier. The whole experiment took about 30 minutes.

4. Results

Participants showed above chance level performance in learning the artificial language under the condition of staged input, which resembled more properties of natural language; by contrast, participants, who were exposed to the input with a random ordering, still could not master the structure.

5. Discussion and conclusions

In the current study, we first successfully replicated the starting small effect. Furthermore, we observed that our manipulation of statistical properties, which enabled the artificial language to resemble the natural language maximally, could facilitate the learning of complex recursion. Our study shed lights on the learning of complex statistical structure and language acquisition

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AN INVESTIGATION ON FIVE YEAR OLD PRESCHOOL CHILDREN'S ART CRITICISM TOWARDS ORIGINAL ART PIECES

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Abstract

Two of the most important skills aimed to be given to children in preschool period are the ability to observe and question. It is a necessity to educate children with a scientific art education process for the gaining of these skills. In art education it is required for the children to question the enviroment they live in aestethically and to be observer to hold their relationship with the environment strong. These aestethical questioning and observing skills allow children to express themselves democratically. When the ability of art criticism is supported starting from preschool period it can be an important tool for the development of the mentioned skills. For this reason in this research the art criticism ability of preschool children were investigated. This research is a qualitative research based on descriptive method. The research group is formed by 60 children of age 5 who are attending 3 different preschools in different status in Nicosia in Northern Cyprus. In this research, *Auguste Renoir:* Madam Claude Monet and Her Son Pierre (impressionist) , *Edward Munch*: Scream (expressionist),. *Salvador Dali Fruit Dish on a Beach* (surrealist) , *Van Gogh*: Bedroom (impressionist), *Marc Chagall* Birthday (post-impressionism modern art), *Piter Brougel* Children Games (renaissance age), *Francısco Goya* Charles IV and His Family (romantism).using these paintings, conducting interviews with children in preschool settings, the art criticism of the children were investigated. The paintings shown were colored copies of reproductions of the original pieces. The children were asked questions relating to description, analysis, interpretation and judgement steps of art criticism. Content analysis is applied to the answers of children based on the categories of acclaim criteria about the art pieces, elements of the art pieces, and attribution related to art pieces. In the conclusion of the research, a status description related to children's examining and criticism of art pieces.

Keywords: Art criticism, Preschool children, Early childhood art education.

WORKING WITH PERPETRATORS OF DOMESTIC VIOLENCE IN PORTUGAL: SOME DATA FROM GEAV PROGRAM

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Abstract

With this presentation we aim to present the work done with perpetrators of domestic violence in Portugal, having in consideration our experience at GEAV, that is an example of the coordinated and specialized work done with victims and perpetrators of violence and crime in Portugal. We will present some empirical data in order to characterize the population we have worked with at GEAV over the last 5 years. We worked, exclusively, with men involved in heterosexual relationships, most of them mandatory clients to the program. The data suggests that the majority of the perpetrators assume the violence adopted against their partners, although not considering the criminal aspects of it; all of them are accused of psychological violence and, the vast majority, of physical violence too. Almost all of them maintain a relationship with the victim who, in some cases, is contacted during the program. Many perpetrators have children and still have contact with them, an aspect that deserves special attention during the intervention process. We propose to describe the program applied at GEAV and the methods and strategies implemented. We will emphasize the particularities of the work developed with perpetrators, the difficulties associated with it, but also the potentialities of this work, especially when it comes to preventing more crimes against women. We also intend to present some principles we consider very important for the success of these programs.

Keywords: Perpetrators, Domestic Violence, Program for perpetrators.

1. Introduction

Domestic Violence (DV) represents a major public issue, with personal, social and economic costs for everyone (Garcia-Moreno & Watts, 2011). In Portugal, DV constitutes a public crime and is defined as any violent behavior (physical, emotional, sexual or economical) perpetrated by the partner or ex-partner against the other partner. It addresses the violence perpetrated by men or women, in past or present hetero or homosexual relationships. It also addresses the violent behaviors perpetrated by parents against children or the opposite.

Since 2007, judges have been allowed to include in their judicial decisions the obligation to complete a program for perpetrators of DV in the legal punishment of this crime. This became an important change for those working with perpetrators, because, at that time, there were just a few institutions working with this population on a regular basis (Manita, 2005) and, because of that obligation, more public funds started to be applied in this field, more institutions started to work with DV perpetrators and some Portuguese programs were created (Cunha & Gonçalves, 2011; Rijo & Capinha, 2012). Portugal now has a national program for perpetrators of DV, implemented by the probation services, that works with male heterosexual perpetrators of DV who have been judicially ordered to undergo the treatment for, at least, 18 months (in pretrial diversion or after being convicted). However, this program is not yet available nationwide and, because of that, other institutions are regularly asked to run programs for perpetrators.

GEAV works within a faculty of psychology, offering psychosocial, psychological and therapeutic support for victims of violence and has some programs for perpetrators, whether of DV or of sexual violence. It maintains a regular work with this population allied to other regular tasks (forensic assessment, professional supervision and scientific research). All of these tasks made it possible for GEAV to become part of a community network working in the area of DV. Working in a network is considered essential, given that intervening in this field requires the capacity to work with other professionals, to be able to communicate effectively with them, to share information and to grasp the possible dangers to the victims (Respect, 2004; WWP, 2006-2008).

Being so, perpetrators of violence can come to GEAV voluntarily (when there is no order – judicial or from the child protective services, CPS), sent by the courts, by the probation services or by CPS, when the perpetrator is a parent and CPS begins to follow that child and family and proposes that the parent undergoes this intervention.

The GEAV program is done in individual sessions with a psychologist. The majority of perpetrators are mandatory clients and all of them are men. The Portuguese statistics confirm that DV is still a genderized violence, with women being the majority of the victims and men being the majority of the perpetrators (SSI, 2013; APAV, 2013). Because of that, most programs are designed for men. Nevertheless, GEAV works, occasionally, with male victims of DV and female perpetrators, but the number of cases is too low. This program usually is completed after 20/25 sessions, even though it may include more. The sessions usually happen twice a month. Perpetrators are required to pay a small fee for each session.

The goals of the first sessions are: gathering of personal data, history of the violent relationship, assessment of the present situation, assessing risk and protective factors, assessing symptomatology and potential psychopathology, personality, beliefs concerning DV and violent behaviors used against his partner and children. The rules of the program and the limits of confidentiality are explained to the perpetrators, who are also invited to sign a therapeutic contract (in which the rules of the program are explained and where it is clarified under which conditions the psychologist may break the confidentiality).

When the perpetrator is in a relationship, we contact the partner, whether or not she is the victim, we clarify with her the goals of the program and gather some additional data about the present behavior of the perpetrator.

This program has a cognitive behavioral approach with an educational dimension and is influenced by feminist theories. The goals are: to motivate the perpetrator for the change and to assume responsibility for his violence; to recognize his behaviors as a crime and their impact; to change beliefs and thoughts that legitimate DV; to make him more capable of recognizing emotions and of regulating himself; to develop personal and interpersonal skills in order to increase self-control; to reduce the risk of victimization of the partner; to eliminate or reduce the violent behaviors and to make him adopt a nonviolent style of relationships.

Through this program we discuss and define DV, human rights, types of violence and its impact on the victims, beliefs about DV and its importance on the legitimacy of violence, analyze the dynamics of power and control; try to develop some awareness of the causes and processes of the violence, in order to make him more concious of the instrumental function of violence; promote the adoption of nonviolent solutions to the resolution of conflicts; propose some tasks, in order to make the perpetrator more aware of his body, cognitive or sensorial signs of anger and to develop some strategies to avoid the anger explosions/improve self-control; discuss good parenting skills and strategies whenever perpetrators have regular contact with children and/or play an important role in their lives; and analyze some masculinity concepts and issues.

We have improved our work over the last few years: we are working with more perpetrators and we are following a more standardized program. This presentation intends to share some of the data we have collected throughout the past 5 years.

2. Methods

2.1. Participants and Procedures

The sample of this study was made up of 37 male perpetrators of DV, with a mean age of 45 years (SD = 10), that started the GEAV program between 2009 and 2013. For this study, we only considered the cases in which the perpetrator came to, at least, 2 sessions of the program. All of them were involved in heterosexual relationships and had been violent towards women. The majority of the perpetrators lived in the north of Portugal, were employed at the beginning of the program (70,2%) and had low school degrees (30,3% had only the primary school, 48,5% had the 6th or the 9th grade and 21,2% had secondary or higher degrees).

The personal data presented in this study was collected in the clinical files of each subject. Two psychological assessment instruments were also used in this study: the Portuguese version of BSI – Brief Symptom Inventory (Canavarro, 1999) and the Scale of Beliefs about DV (Machado, Matos & Gonçalves, 2008).

3. Results and Conclusions

The majority of the men were married or lived with the partner (77,7%) and almost all of them were involved in an intimate relationship (83,8%), with the victim of the violence in 78,4% of the cases. In 40,5% of the cases the victim was part of the process – they were given information about the participation of the man in the program and 29,7% of them came to GEAV and participated in one or more sessions. Twenty five men (67,6%) were parents, having children from the present relationship. From those, 59,5% had their children living with them, which explains why so many of them were sent to the program by CPS (31,4%). The other ones were referred to the program by the probation services (20,0%) or by institutions working with the victims (22,9%). Only 11,4% of the men came to the program without an indication by formal institutions, 41,7% of them came to the program voluntarily and the rest were mandatory clients.

In 77,8% of the cases the violence was reported to the police, although in many cases this judicial process was in the beginning and there was no formal obligation for the perpetrator to come to the program. In 29,7% of the cases (11) there was a judicial order to come to the program: in 4 cases the men had been convicted for DV, in 6 cases the perpetrator was in a pretrial diversion and in only 1 case, the man had a restriction order with the obligation to come to the program. In the remaining 70,3% of the cases the men had no judicial order applied (nevertheless, many of them were in the program because of an agreement with CPS).

Regarding the types of violence (Table 1), all of perpetrators were accused of psychological violence and the majority of them were accused of physical violence (91,9%). Only 21,6% were accused of violence against children or of economic violence. Being accused of sexual violence was less prevalent in the sample. The majority of the men assumed they had adopted some sort of violent behavior (67,6%), although only 35,1% assumed that as a criminal issue.

Table 1. Types of Violence Perpetrators Were Accused of:

	Yes		No		Missing information	
	n	%	n	%	n	%
Physical Violence	34	91,9	3	8,1		
Psychological Violence	37	100				
Economic Violence	8	21,6	29	78,4		
Sexual Violence	3	8,1	34	91,9		
Violence against Children	8	21,6	27	73,0	2 (5,4)	

None of the perpetrators of our sample had diagnosis of psychopathology. The data available concerning their emotional well-being validates this idea, since it reveals no relevant symptomatology. The Portuguese version of the BSI was administered to 38% of the sample and no results fall above the average of the general Portuguese population, rather, most of them are lower than the average data. This finding may be explained by the inexistence of psychopathology in this sample or it may be due to a social desirability effect.

Table 2. Brief Symptom Inventory (n = 14)

	Mean	SD	Portuguese values
Symptom Scales			
Somatization	,52	,55	1,00 (SD = 0,5)
Obsessive-Compulsive	,90	,54	1,70 (SD = 0,5)
Interpersonal sensitivity	,81	,47	1,30 (SD = 0,4)
Depression	,98	,52	1,35 (SD = 0,3)
Anxiety	,61	,42	1,25 (SD = 0,3)
Hostility	,64	,44	1,15 (SD = 0,3)
Phobic Anxiety	,27	,35	0,75 (SD = 0,3)
Paranoid Ideation	1,17	,64	1,40 (SD = 0,4)
Psychoticism	,60	,48	1,00 (SD = 0,3)
Global Indices			
Global Severity Index	,72	,30	1,50 (SD = 0,2)
Positive Symptom Total	24,93	9,50	33 (SD = 6)
Positive Symptom Distress Index	1,52	,27	1,70 (SD = 0,2)

Concerning alcoholism and other addictions, in this sample only 6 perpetrators (16,2%) had identified problems related to alcohol consumption and only 2 cases (5,4%) were referred to as having problems of drug abuse. This finding may be explained by the fact that whenever an addiction is diagnosed, the perpetrator may be sent to other institutions to receive specialized treatment for the addictions and, if that happens, he may not attend our program simultaneously.

Regarding the beliefs about DV, the average results of the perpetrators in our sample revealed to be somewhat higher than the results of the national sample, on the Portuguese Scale of Beliefs about DV, but still within the reference range for the national population.

The mean number of program sessions attended by the subjects was 10 (total number of sessions ranging from 2 to 31), which is a low number for a program that aims to produce behavior and attitude changes. 24,3% of the men quit the program after the second session, which is consistent with the literature (Gondolf, 2013) and corroborates the importance of constructing the first sessions as important moments to motivate the perpetrators. In future research we will explore the characteristics of the dropouts and try to understand if there is any characteristic of the perpetrator that may influence an early dropout or, instead, the explanatory reason shall be found in the failure of the motivational strategies that, in that case, need to be improved.

Only 24,3% of the perpetrators come to more than 12 sessions, half of the number of sessions proposed. Of those, 21,6% concluded the program and 10,8% are still in the program. In 48,6% of the cases the psychologist working with the perpetrator collaborated with colleagues of other institutions (namely, those working with the victim). In 35,1% of the cases the clinical assessment concluded that there were changes in the behaviors of the perpetrator and no violent episodes were perpetrated by these men during the implementation of the program.

Considering the information collected from the perpetrator, the victims and the network colleagues, there were only 2 men in the sample that perpetrated low-severity physical violence against the partner during the program. 21 men continued to be psychologically abusive with the partner during the treatment. We still don't have enough follow-up information to characterize their behaviors after the completion of the program.

The overall characteristics of this sample are consistent with those found in the literature: low school degrees, low socioeconomic status, being part of an intimate relationship, most of them with the victim of the violence, and having children living with them. Thus, we must be conscious that there is still a risk to the family. As they continue to assume parenting roles, it seems crucial that we need to discuss parenthood and educational strategies, in order to prevent more violence against children. Having children can also act as a motivating factor for behavior change.

On the other hand, we consider that this first analysis of our data confirm the importance of working with perpetrators in order to prevent more crimes and the need to make this kind of program available to more perpetrators, considering that each time the criminal side of DV is discussed with them and they assume the responsibility for the abusive behaviors a message against DV is sent. We also think that this kind of program should constitute an answer to those perpetrators who do not come into contact with the judicial system or, if so, are not convicted for the crime and, consequently, are not obliged to attend these programs. Those perpetrators which are parents usually contact firstly with CPS that may refer them to these programs and make them start them in an early stage. This often means that when the judicial process starts they have already been in touch with some information about DV, its dynamics and consequences, which may lead to a more cooperative behavior towards the judicial and therapeutic processes and represent a high level of protection for the victims.

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HIGHLIGHTING OF PROCESSES OF EMPATHY OF RAPE VICTIMS TOWARD THEIR AGGRESSOR DURING PSYCHOLOGICAL INTERVIEW

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Abstract

Contrary to the abundance of studies dealing with the relationship between aggressor empathy deficit and sexual offending (Chiland, 2012 ; Barnett and Mann, 2013a/b ; Guiller et al., 2011 ; Pham, 2007), there is a paucity of research devoted to the study of the processes of empathy of the rape victim towards her aggressor (Carver, 2004 ; Garden Breche., 2003 ; Sironi, 1999). The goal of this innovative research is to the mental states that the rape victim lends to her attacker during the course of the psychological interview by means of discourse analysis. Moreover we test the link between the victim's search to understand the perpetrator (quest for the meaning) and access to resilience. Our primary results show genuine cognitive efforts conveyed by the victims in order to understand their abuser.

Keywords: Rape, Trauma, Empathy, Resilience, Intersubjectivity.

1. Introduction

Rape is an act of interpersonal violence perceived as one of the most traumatic events for human beings (Darves Bonoz, 1996). Recognized as an intentional trauma (Sironi, 1997) it integrates with traumas linked to interaction, intersubjectivity and inter-individuality (Darves Bonoz, 1996 ; Sironi, 1997). Following a rape, human semantic systems become altered (Darves Bonoz, 1996): the destructive intent of the author is inconceivable, incomprehensible, and unthinkable for the victim. However, more or less rapidly, the quest for the meaning of the traumatic event emerges (Bessoles, 2008). It is a cognitive process which allows the victim to give meaning to her experience by searching for explanations, reasons and causes for the occurrence of the trauma (Bessoles, 2008 ; Geninet and Marchand, 2007). As an intentional trauma, this quest for meaning implies an attempt to understand the aggressor as well. As such, it introduces the processes of empathy of the victim towards her aggressor (Sironi, 1997). The victim searches for answers to a number of questions such as "what his intentions, motivations?" (Bessoles, 2008). Two components of empathy may be mentioned: an emotional state of mind (Favre et al, 2005) (Tisseron, 2010) and a cognitive state of mind (Favre et al., 2005; Tisseron, 2010). Our main focus herein will be on the latter state. Cognitive empathy is the ability to represent the mental states of others. It consists in the intellectual grasp or imagined mental state (e.g. emotional). In order to elaborate a representation of the rape, victims investigate the rapist's intention (Sironi, 1997). This psychological process contributes to the therapeutic process. It allows the victim to re-appropriate the event, to apply a certain logic to the event, thus allowing her to move from a position of helplessness and passivity (a potentially traumatic component) to an active position. This genuine post-traumatic mental work represents a possible pathway to resilience (Vanistendael and Lecomte, 2000).

Despite the interest in research pertaining to the search for meaning, trauma as the result of the hand of man, particularly interpersonal violence has been relatively little studied in conjuction with this issue. Moreover, studies reporting the victims' quest for the meaning of violence through empathy with the perpetrator are rare (Sironi,

1999). From an empirical and theoretical perspective, the present work can be linked directly to current practice and contribute both on the medium and long term, to the emergence of clinical and therapeutic guidance in support of rape victims in order to promote resilience.

2. Method

Considering the language as a medium for the transmission of thoughts, we hypothesize that the victim's empathetic processes can be identified in her speech patterns. Attempting to understand the perpetrator (quest for meaning) is also a resilience factor for the victim.

In order to test these hypotheses, we transcribed and studied four clinical interviews with adult female rape victims. Our goal was to highlight the mental states the victims ascribe to their aggressor by using discourse analysis and, in particular the pragmatic approach and logic interlocution (Batt & Trognon, 2010; Searle, 1985; Trognon and Batt, 2003, 2010, 2011; Vanderveken, 1988). In addition, the Rorschach test, the Weschler Adult Intelligence Scale (WAIS) and various questionnaires were used in order to investigate the victim's psychological state and resilience.

3. Results

Our preliminary analysis highlights the cognitive efforts made by the victims to understand their abuser. The key question appears to be "why did he do it?". In order to answer this question, victims are inclined to consider certain elements of the aggressor's history ("upbringing" and marital problems, etc.).

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DEFINITION AND MEASUREMENT OF RESILIENCE FOLLOWING PHYSICAL CHILD ABUSE: COMPARATIVE ANALYSIS

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Abstract

The effect that physical maltreatment has upon an individual's functioning has interested researchers for decades. Maladaption is only one of a number of different pathways and potential outcomes (Futa, Nash, Hansen, & Garbin, 2003) and, despite having been at significant risk, some individuals demonstrate an overwhelming ability to do well, showing resilience to difficult experiences (Luthar, 2003). Different pre-existing personality traits, relationships with friends and family, resources and previous experiences are found when comparing resilient individuals to those who have more difficulties (O'Dougherty-Wright & Masten, 2004). It has also been found that, regardless of which criteria are utilised, resilience can fluctuate. It has been argued that resilience is not a stable characteristic, instead the individual must change and develop according to their situation (Rolf, Masten, Cicchetti, Neuchterlein, & Weintraub, 1992) and actively adopt tactics to cope with the stress that they experience (Lazurus & Folkman, 1984).

This study investigated whether different approaches to the measurement of resilience following childhood physical abuse provide similar outcomes. Specifically, are the same individuals categorised as resilient when using two commonly utilised psychometric measures and self-report. The sample consisted of 328 women (Mean age 35.06 year, range 18-71) recruited through advertisements to an online study. Participants completed a concatenated version of The Parent-Child Conflict Tactics Scale (CTS-PC, Straus, Hamby, Finkelhor, Moore, & Runyan, 1998) to identify physical abuse plus a screening questionnaire of self-reported outcomes (education, relationships, mental health and/or psychopathology, interpersonal relationships, criminal convictions and career/employment). They also completed The Connor-Davidson Resilience Scale (CD-RISC Connor & Davidson, 2003), The Trauma Symptom Inventory (Briere, 1995) and the Culture-Free Self-Esteem inventory.

All completed questionnaires were downloaded and the data analysed using SPSS. This study found high levels of maltreatment (neglect, sexual, physical and psychological abuse): 87.4% of participants reported parental childhood maltreatment. Of these, 77.9% reported physically abusive experiences in conjunction of other types of abuse or neglect. Approximately 12.6% of the participants did not report any history of childhood maltreatment and formatted the control group. The three groups (physical abuse, other abuse and the control group) were statistically different (demographic information, psychopathology and resilience performance).

In conclusion, this study is an important update for resilience maltreatment literature. In fact, some personal characteristics are associated with a resilient outcome. Clinically, these results have social and policies implications.

Keywords: Resilience, Physical abuse; Child maltreatment, Positive outcomes.

TRAINING OF PSYCHOLOGISTS IN UNDERGRADUATE DEGREE PROGRAMMES BASED IN PSYCHOANALYSIS: REFLECTIONS ON THE ACADEMIC SUPERVISION

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Abstract

This paper proposes a theoretical reflection on the process of training psychology students, from the authors' experience as lecturers in an undergraduate Psychology course. It also discusses the role of the academic supervision as a promoting agent of professional training, aiming at understanding the subjective aspects involved in a practice guided by Psychoanalysis. It starts from the principle that in the search for a higher education institution, the student has previously investigated the theoretical framework predominant in the undergraduate program, as well as the prerequisites necessary for professional training. The work focuses on the need for a consistent training program with the assumptions of an analytical orientation to which the learning of listening is essential for the professional practice, and the involvement of the teacher-advisor in this process. Therefore, if we consider the assumptions of Freud and Lacan, the theoretical study combined with the supervision of clinical cases and personal analysis are essential aspects in the process of a professional training. It is known that we can not expect from students more than the fulfillment of the standard curriculum requirements for an undergraduate degree. But a question persists: how to foster the search for personal analysis among students, making them realize its importance? The tutor takes an important role on this process, prompting the student to reflect about the implications of his or her own subjectivity in the therapist-patient relationship.

Keywords: Training of psychologists, Internships in psychology, Academic supervision.

1. Introduction

Psychology is a field of study that has been increasingly attracting undergraduate students in Brazil. Driven by different aspirations, those students seek explanations and the understanding of human beings and their interactions with the society in which they are inserted and, therefore, build the possibility of intervene in this context.

In higher education institutions, this complex proposal manifests itself in a diverse syllabus with a variety of emphasis related to the professional areas and theoretical frameworks. Although these institutions meet the requirements of the National Curriculum Guidelines - DCN (BRASIL, 2011) for Psychology undergraduate courses, there are still major differences in the way they prepare the students to work in the areas presented by the Federal Council of Psychology (CFP, 1997) as the main applied fields in Psychology. These approaches are presented in the Pedagogical Project of the course so that the students, when choosing one institution or another, will be able to consider the emphasis that each one prioritizes. This document organizes the syllabus and courses that the educational institutions should offer and, at the same time, directly or indirectly, defines which theoretical framework guides the professional training. The author's experience as lectures and supervisors of traineeship in a Psychology course reveals that the students are not used to searching for this information when choosing the institution that will be responsible for their professional

training. When asked about their professional goals, they show great interest in the Clinical field – one of the emphases offered in the institution.

Considering that the Psychoanalysis is the main theoretical framework approached in the course, the faculty members, especially supervisors, are constantly concerned about transmitting not only theoretical and technical conceptions, but also the ethics that guides the profession.

Such issues give room to reflection on the role of the teacher-supervisor and his/her relationship with the student-trainee, considering that, as stated by Lacan (1964/2001), teaching Psychoanalysis and its assumptions cannot be transmitted except through work-transference.

2. Considerations about Professional training in Psychology in a Psychoanalytic-based course

The authors have had the opportunity to discuss with co-workers relevant aspects that underlie the professional training in Psychology in a Psychoanalytic-based course. One relevant aspect is that, during the undergraduate course, the students are encouraged to take part in many different activities inside and outside the University. They begin to get in touch with different professionals, either from the faculty members or from outside college – people who they meet in internships, practices, and interviews. In these activities, the students have the chance to talk to psychologists from different work fields and theoretical frameworks.

Since observing clinical practice in a traditional setting is much more difficult, the activities of the course are developed in other fields of work, promoting the contact with new realities as well as broadening the students' view on the professional practice, breaking old paradigms about the role of the clinical psychologist. Understanding clinical practice as an activity that may take place in several institutions and it is based much more on the professional, their relation with the subjects and the listening regardless the setting, allows the students to redefine their expectations towards the course and prepare themselves for their practice in a more realistic way. According to Marcos (2011), the students need to learn how to listen to the demands that arise from their practice. They need to accept their lack of knowledge in order to engage in a process of building their own practice as psychologists, rooted on psychoanalytical principles. In order to achieve that, the students need to receive proper training, based on Freud's (1919/2009) assumptions. According to it, personal analysis, orientation with experienced professionals, combined with theoretical study, are the key elements in the development of a professional who is able to listen to the other.

Internships and practices are privileged ways to show students that there are different roles for a clinical psychologist, different types of institutions and diverse styles of teams in which they could work. It is important, therefore, to discuss the specificities of the clinical field in Psychology and, consequently, what is essential to offer in a traineeship in this field. In this sense, the capacity of listening reveals itself as the key aspect to be worked.

If listening is the major element, it is fundamental to discuss how to teach to listen. Based on the words of students and trainees, complemented by information collected during the post-doctorate research conducted by one of the authors[*], they propose a discussion about psychology training and present considerations based on teaching and supervising experiences.

3. Discussion

As starting point, in order to illustrate the aspect to be discussed, the authors present the statement of a senior psychology student[†]. When asked about the reason

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[*] Developed by Ana Paula Stahlschmidt and supervised by Dr. Maria Folberg, PPGEDU-UFRGS.
[†]Subject of the post-doctorate research conducted by one of the authors; psychology student from a Brazilian institution.

for choosing Psychology, she mentions a negative experience she had had with a professional in this area. She says that in a delicate moment in her life, this professional suggest that she should "entertain herself" in order to overcome the difficulties. The student had a strong feeling of "not being heard". This negative model made her reflect about what kind of professional she would be. She wanted to avoid disastrous interventions such as the one she had had. "I really thought about working with teenagers. I did not want them to feel the way I felt". When questioned about the aspects she considered important in the learning of listening, the student emphasizes fundamental role of supervision: "This beginning is really hard. We receive a patient and then we go to the supervisor in order to understand what we are doing."

She also mentions the experiences she considers as "positive", such as her personal analysis, which she considers as a relevant moment to discuss about her clinical training. "I learned a lot from the analysis. I learned how to listen…It is funny to talk about listening with someone who is listening to you!"

It is evident that, as pointed out by the student herself, during this process, the supervisor has a lot to contribute, always taking into account, his/her role, limits and the students' demands. The authors could perceive how emotionally affected the students were in face of the realities they were exposed during their practice. Being flooded by the fragility and suffering of another person triggered aspects from their own subjective constitution and the construction as desiring subjects, permeated by norms, rules and standards of conduct dictated by society. The trainees bring with them their life stories, sufferings and happiness. While discussing these feelings, the supervisor is able to intervene and show the importance of considering not only the internship context and the subjects involved, but also the subjectivity of the trainees and the implications of the way they perceive things and how they listen to the subjects.

4. Conclusions

Based on the students' statements, it is possible to understand the fundamental role played by the academic supervisor for opening new possibilities of fields and ways of practicing Psychology, as well as fostering the practice of an analytical listening among students. The theoretical study provides the basis for an understanding, but listening should also be exercised as part of clinical practice. When listening to themselves, in their own analysis, the students are able to realize possible ways of listening to the other.

The supervisor also assumes a major role in the process when he/she points out some slips or blind spots that may surface during the professional practice. He/she should, when it is pertinent, signalize the need for personal analysis as a helper in the construction of a Psychoanalytical-based practice. On the one hand, undergraduate education is only the first step in the analytical training; on the other hand it must provide initial subsidies that go beyond classroom teaching. Figueredo (2008), based on Lacan's assumptions, points out that what is possible to teach is, in fact, the desire of learning. It is up to the student to decide which path to take.

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ECOS – COMMUNITY STRATEGIES FOR SOCIAL OBSERVATION

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Abstract

Background: It is intended to present ECOS (Community Strategies for Social Observation), a selective and indicated drug addiction prevention project implemented in Porto, Portugal, founded by SICAD (Addictive Behaviors and Dependency Intervention Services), and its final evaluation results. The project was based on two integrative theoretical models – the Structural Model of Cowen and the Eco-Developmental Model of Felner – both of whom go beyond the individual level of intervention, having a ecological and community intention. Apart to the person-centered approach and skills development, the intervention also focused on different community settings, such as family, school and peer group, using preventive strategies based on the methodological principle of empowerment. *Objectives:* The general objectives aimed at reducing the number of potential risks, decrease the risk of development vulnerabilities, and the promotion of interpersonal skills and protective factors. *Method:* 160 families participated in the project, what resulted in 370 participants. The participants were distributed in the 5 dimensions of the project: Individual and Family Support; Parental Training; Diversification of Cultural Experiences; Children´s Group Intervention, and Youngsters Group Intervention. *Results:* The results seem to reflect the premises of the systemic intervention. The behavioral observation, self-reports, the collected information and records by the technical team, showed improvements in the relationship quality between parents and children, between peers, and between family and school. Furthermore, there are evidences of a better emotional management, and improvements to the level of autonomy, responsibility and self-concept of the participants. *Conclusion:* There is evidence of improvement at all ecosystems. Accordingly, there is an urgent need to replicate such projects in similar communities.

Keywords: Community strategies, Drug addiction, Prevention.

1. Introduction

This work intends to present a selective and indicated addiction prevention project, that was developed in face of the needs felt in a specific risk context (neighborhoods of social housing in Lordelo do Ouro). The preventive strategies were based in what the literature indicates as being more effective. The project, named Community Strategies of Social Observation (ECOS), was mainly focused in the prevention of substance use and associated risk behaviors in families of this community.

The project took place between October 2008 and September 2012. It was funded by the Institute for Drugs and Drug Addiction (IDT) under the Integrated Response Operational Programme (PORI). The IDT also provided proximal supervision and collaboration. The project was promoted and executed by ADILO - Agency for the Integrated Development of Lordelo do Ouro. The project evaluation was carried out by the technical team and partner organizations.

2. Background

The ECOS project was based in two integrative models: Cowen's - Structural Model (1982) and Felner's et al Eco-Developmental Model (1991). Integrative models

go beyond the individual level, embracing ecological and community concepts (Tinoco, 2004). Consequently, we took into account, throughout the design and implementation of this project, the fact that prevention must analyze and intervene in the potential of the institutions that are at the source of the individual's socialization. Apart of the ecological and communitary dimensions, Cowen's structural model (1986) also provides another dimension based in the person-centered approach and in skills acquisition. Through the individual's dimension, the project sought to understand risk as a process that acquires differentiated outlines throughout the development process. It was also intended to promote some emotional and social skills in children and adolescents, by reinforcing the quality of the patterns of parental attachment and by adjusting educational strategies. It was also intended to improve the quality of emotional relationships, to generate organization and autonomy for the children and adolescents. We also considered Bronfenbrenner's Eco developmental model (1979, 1986) in the design of preventive strategies. This model suggests that interventions should encompass different levels of social ecology and fields of knowledge to be successful. In this project we sought to intervene directly and indirectly both in risk and protective factors, in different interventional areas - family, peers, school and community and at different levels of the social ecology - micro, meso and exo-systems.

The intervention strategies used in this project, both in its individual dimension, as in the different social ecology systems were guided by Kessler's and Albee empowerment methodological principle (cit in Cowen, 1986). This principle follows the logic of co-negotiated construction of the needs and responses with the target population, in a creative and flexible process aimed to improve the quality of the relationships in the organizations and in the community. The empowerment of the families in this project was reached through a variety of participatory strategies (Reich, 2007), with particular emphasis in the joint co-construction with the target population and in the implementation of the methodology of the Oppressed Theatre (Boal, 2000).

3. Objectives

The prevention objectives in this project were defined based on a multi factorial perspective, having in mind the social reality in question. We sought to reduce the number of potential risk situations, the acquisition of protective skills in different dimensions and systems, as well as the promotion of resilience in face of adversity. It's intended with this paper to present Project ECOS, as well as the results obtained from the internal assessment.

4. Methods

160 families participated in the project, what resulted in 370 participants. The participants were distributed in the 5 dimensions of the project: Individual and Family Support; Parental Training; Diversification of Cultural Experiences; Children´s Group Intervention, and Youngsters Group Intervention.

The internal evaluation was carried out by the technical team and technicians from the partner organizations who worked with the families. The evaluation methodologies used, were the following: screening and early family diagnosis; elaboration of a family process; behavioral indicators observation, self-reports, and information from meetings with partner organizations and services. The instruments used were the following: a) individual and family development plan, b) attendance records, c) assessment records and behavioral observation d) records of attendance and behavioral observation by the school authorities, e) formal and informal articulation with local services and partner organizations.

5. Results

Several changes in the more assiduous families were observed, of which we highlight, the improvement in the quality of relationships (between parents and children and between peers), better emotional management and improvement in the level of autonomy, more responsibility and self-concept of participants from different groups (parents, children and youth). Consequently, positive improvements were observed in personal and social skills. Both at the most micro-systemic level in family relations, at the meso-systems parent-school and family-school up to the exo-systems, relating to local services. We also highlight the fact that for some participants, the participation in the project meant breaking out the social isolation, the establishment of new relations and a more effective emotional support, as well as more positive experiences.

6. Conclusions

The results obtained seem to reflect a systemic intentionality of the intervention. There is evidence of positive developments in all eco-systems. Accordingly, there is an urgent need to replicate such projects in similar communities.

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SOCIAL INFLUENCE TACTICS OF MEN AND WOMEN
AT THE WORKPLACE

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Abstract

The aim is to present issues of social influence and manipulation at the workplace. The research was carried out on the group of 324 men and women aged 19 to 55. The method presented scenarios of 4 situations at the workplace: promotion, criticism, exam, business lunch, were used. They differ from: profit vs. loss perspective, and one's own vs. partner's opposite sex. The subjects were asked to describe on the 0-9 points scale their probably behaviors measuring the 5 strategies of social influence: self-promotion, self-deprecation, enhancement of others, conformity, adonization (exposure of physical attractiveness). The multi-regression analysis showed that the predictors of social influences` strategies are type of situation, nationality, psychological masculinity vs. femininity, and the influencer's age.

Keywords: Social influence, Gender, Workplace.

1. Introduction

Some studies have suggested gender differences in the use of influence strategies at the workplace. They have their source in role stereotypes comprising not only social competence, but also with the perception of power and approval for their use. The gender stereotypes determine different self-presentational norms connected with modesty which is socially perceived as a highly "feminine" characteristic. And all though the modesty style of self-presentation is generally highly valued, a more restrained behavior is more expected from women than from men in whom, on the contrary, high self-assurance and moderate boastfulness is desirable (Dabul et al., 1997). Additionally, from the perspective of gender stereotypes, a self-presentational tactic is important consisting in presenting one's own physical attraction as a woman or man, called adonization (Leary et al., 1994).

Important instruments of social influence in everyday life are mainly self-presentation: opinion conformity, enhancement of others (flattery, compliments), self-presentation (in a direct way realized as positive self-promotion, or in an indirect way realized as self-deprecating behaviors (Jones, 1964). People function in a different way in situations of profit and loss (Tversky & Kahneman, 1982). Motivation for behaviors of defense from loss (failure) usually is greater than motivation for obtaining profit (success) and generally people are characterized by an aversion to loss.

The goal of the present cross-cultural study was to investigate the predictors of social influence strategies, the effects of people`s gender and the gender of interaction partners in profit versus loss situations at the workplace.

2. Methods

In the study, to measure social influence strategies, the researcher's own method was used, containing scenarios presenting four situations at the workplace: 1."Examination" - situation of loss + cross-sex interaction. 2. "Criticism" - situation of loss + same-sex interaction. 3. "Business lunch" - situation of profit + cross-sex interaction. 4. "Promotion" - situation of profit + same-sex interaction. Having read the scenarios, the subjects described what their behavior would be like, stating their attitudes towards the five social influence strategies, using a 10-point Likert`s scale:

positive self-presentation, self-deprecation, conformity, enhancement of others, and adonisation. To diagnose gender identity the Bem Sex Role Inventory (1974) was used. The participants were students of University of Silesia in Poland (47,22%) and the University of Skopje in Macedonia (16,97%). The age range of the subjects was 19 to 55 (M=25,9 year, SD= 8.06 year). In the research 324 subjects were examined: 171 women (136 Polish and 35 Macedonian) and 153 men (114 Polish and 39 Macedonian).

3. Results

The results of the multiple regression analysis for all social influence strategies in workplace are presented in Table 1 (only significant beta included). It showed that the share of the depended variables used in the research (type of situation, gender, age, nationality, masculinity or femininity) in the variation of strategies occurrence at the workplace was about 21% for enhancement of others, 17% for self-deprecation, 10% for self-promotion, 15% for conformity and 13% for adonization.

Table 1. Results of regression analysis for social influence strategies in workplace.

Strategy	self-promotion		self-deprecation		enhancement of others		conformity		adonization	
	R^2	β	R^2	β	R^2	β	R^2	β	R^2	β
	.10***		.18***		.21***		.15***		.13**	
Predictors										
age		-.10***				.10***		.05*		
feminity										.14***
masculinity		.18***				.05*				.13***
nationality		.07**		.14***		.26***		.10***		
business lunch		-.10***		.07*		.42***		.35***		
examination		-.22***		.07**		.19***		.22***		
promotion				.43***		.06*				

Note. *** p < .001; ** p < .01; * p < .05.

The factors to the highest degree explaining the use of the tactics were the type of professional situation. The strongest predictor of self-promotion were type of situation: examination (cross-sex interaction; risk of lose), (β=.22). and masculinity (β=.18). The predictor of self-deprecation turned out to be a situation of interaction with a superior, connected with promotion (β=.43). Essential predictors for this tactic were also professional situations of a examination (β=.07) and business lunch (β=.07). In turn, willingness to use the enhancement of others strategy was most frequently declared in the situation of profit, in cross-sex interaction of the least formal character (business lunch) (β=.42) and in a situation of a examination (β=.19). Significant predictors of the use of the enhancement tactic were also masculinity (β=.05) and age (β=0.10). A situation of the lunch with a partner of the other sex, was the most conducive to conformity (β=.35). Similarly, a situation of examination carried out by an examiner of the other sex was a strong predictor of conformable behaviors (β=.22). However, situations connected with cross-sex interactions were not conducive to the self-promotion strategy. The most significant predictor for the use of this tactic was masculinity (β=.18). Also for adonization, covariance connected with femininity (β=.14) and masculinity (β=.13) was the most significant.

4. Discussion

The present study confirmed the hypothesis about a significant role of gender and also a perspective of profit and loss, in taking up social influence strategies in everyday situations at the workplace. Significant predictive power was noted for the variable of gender identity (psychological masculinity and femininity) in relation to some influence strategies. It also turned out that it is mainly the gender of the partner that is important for the social influence strategy. Cross-sex interactions prove to be situations to the highest degree activating the tactic of enhancement of others at the workplace.

Compliments are more readily used by subjects of high masculinity. Generally, intensive use of this tactic by male subjects of both sexes is a consequence of their orientation mainly towards professional success and high instrumentality.

A professional situation connected with promotion in the face of profit proved to be the strongest predictor of influence through the self-deprecation tactic. In this situation superior can promote a subordinate without any concern about his/her own career and position, because subordinate is presenting oneself as a less competitive and less competent person than his/her superior. Also, professional situations connected with cross-sex interactions, turned out to be significant predictors of self-deprecation. In such situations people usually tend to obtain an image of a modest person, which is to secure not only an increase of likeability, but also elicit willingness to help a person of the other sex. Masculinity proved to be the strongest predictor of the use of self-promotion tactic. This result is consistent with the stereotype of an active and self-confident man.

Cross-sex interactions and not, as may be supposed, situations threatening with loss, are main predictors of conformable behaviors. Whereas, a same-sex interaction (criticism by a superior and promotion) does not elicit conformable behaviors in as strong way as the other sex of the counteracting. Psychological consequences of gender stereotypes and a wish to be accepted by people of the other sex sometimes prove to be stronger than professional interests of an individual. However, contrary to the classical findings of social psychology, it turned out that the gender is not a predictor of conformity, and neither is the subject's masculinity or femininity.

Preference of the social influence strategy consisting in the use of adonization is connected with both high masculinity and femininity of the subjects. The data suggest that only undifferentiated gender identity is not conducive to the use of this influence strategy. The use of adonization is explained by situational variables. It is mainly the situation of profit, both in cross-sex (business lunch) and same-sex (promotion) encounters, that influences a more frequent use of such a self-presentation. Whereas, a same-sex interaction threatening with loss (criticism by a superior) is a negative predictor of using this style of self-presentation.

In summary, the presented study confirms the socially and different scripts of behavior realized in professional situations in same or cross-sex contacts at the workplace. At the same time, the results prove that cross-sex interactions are of great importance for the subject and psychological consequences of gender stereotypes and a wish to be liked by people of the other sex may sometimes prove more important than professional goals, profit or loss.

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SYSTEMATIC APPROACH TO PUBLIC TRANSPORT DRIVERS STRESS PREVENTION

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Abstract

Concerning public transport drivers, stress is one of the crucial issues that influence not only their lives but also the company culture of the transport companies, public life and traffic safety. The aim of our project was to create a complex design of the stress prevention programmes. The activities include both analytic and arrangement phase. The whole company (city) context as well as the individual context is considered to keep the anti-stress arrangement effective. Based on our experience the systematic approach is significantly more effective than particular arrangements.

Keywords: Stress prevention, Public transport, Driver.

1. Introduction

The occupation of the public transport driver is considered one of the most stressful. Stress has many negative effects (Tse, Flin & Mearns, 2006). It affects the physical and mental health of the drivers and there is an increased risk of the traffic accidents (Greiner et al., 1998) – due the stress reactions, risk behavior as well as fatigue (Biggs, Dingsdag & Stenson, 1998). There is higher turnover rate and higher sickness absence with the stressed drivers (Tse et al., 2006). Overstressed drivers also do not cope adequatelly with the custom oriented culture of the public/urban transport companies and that lowers the satisfaction of passengers and the attractivity of public transport.

It is obvious that stress of the public transport drivers is a serious issue that affects not just the lives of the drivers, but also the company culture and public life as well as the traffic safety.

The aim of our project was to create a design of an anti-stress training for public transport drivers – including programmes for stressed drivers as well as programmes for drivers that experienced an accident. The goals were especially:
- Increase of the stress-coping skills level
- Minimising of the stress stimuli
- Public transport safety increase (accident rate decrease)

Soon it was clear that simple anti-stress training is not a solution. Individual stress of the drivers is usually a complex issue influenced by many factors. Therefore we created a complex system of anti-stress prevention in public transport companies.

2. Design of the activities

2.1. Phase 1 - Research

The aim of the research phase is to define the needs and priorities as well as the resources which company has.

There are several main aspects that should be considered and investigated:
- Vision, mission, strategy - strategic priorities of the company, city policies

- Expectations of the top management and trade unions
- Resources – human, financial, technical
- Needs and satisfaction of drivers – we made a satisfaction survey (348 respondents), which measured the importance of the crucial needs of the employees and their fulfilment. For this step we have developed ImpoSat method combining focus groups, in-depth interviews and quantitative survey. The method is not very obtrusive nor demanding for the respondents, yet provides enough information.

The research showed some risky issues (lack of appreciation from passengers, support and concern from the employer, leadership) as well as important resources (joy of driving or job guarantee as the key motivating factors).

In our project we also investigated the stress factors that public transport drivers perceive as crucial (traffic, passengers, technical issues, private issues), strategies of coping with stress, psychosomatic aspects etc.

2.2. Phase 2 - Arrangements

The arrangements should always follow the findings from the previous phase and should be interconnected so their synergy was maximised.

There are several areas that should be considered:

2.2.1. Concrete arrangements (technical, organizational, company culture issues…)

2.2.2. HRM tools. The systematic arrangements that cover following areas:

Recruitment process (HR marketing, targeted job descriptions/competency models, assessment methods) - search and selection of the right people.

Appraisal system – job descriptions and competency models, clear definition of required behaviour and performance, goals and priorities outline, effective feedback both to employee and manager)

Remuneration - benefits and sanctions (which confirm and support required behaviour and performance)

Training and development system – continuously anti-stress programmes focused on:

Stress prevention (individual skills and strategy of coping with stress) – group or individual development/therapeutic programmes for all drivers and special programmes for drivers after accidents)

Leadership (required managing style, managing skills – especially for the line management, workshop for higher involvement of managers into the process)

Communication and team cooperation support, vertical as well as horizontal communication (where needed)

2.2.3. Additional therapeutic help (individual anti-stress programmes, individual programmes for the drivers after accident). Most of the clients can stay anonymous. It seems useful to work not only on work problems but also on private issues. Direct involvement of the driver's families or friends can help to increase the efficacy of the intervention.

Stress prevention programmes are an important part of the whole system. There are two main groups of drivers that attend these programmes:

1. Drivers that are interested in the stress issues and attend individual or group anti-stress programmes voluntarily – most of those clients can usually remain anonymous.
2. Drivers that are assessed as problematic (usually based on an appraisal system outputs or ad hoc manager´s appraisal)

The training and development programmes should be continuously evaluated.

We use feedback questionnaires and appraisal from the managers, where possible.

Systematic set of arrangements provides a complex procedure for the prevention and reduction of the stress of the public transport drivers. The research phase is very important as an informational support for tailor-made arrangements. It also reinforces the relationship between the suppliers of the research, counseling,

therapeutic and educational services. We found very important to outsource most of those services. Many of the Czech public transport companies use internal psychologists for the psychological diagnostics, but it turned out better to use outsourced services for the projects focused on the care of employees or at least to divide diagnostics from care. External researchers, consultants, lectors and therapists are usually more trusted. The participants of the programmes feel safer and more comfortable when all the activities take place outside the company, and when possible, the participants can stay anonymous.

3. Conclusion

Concerning stress prevention or reduction it is always necessary to consider the whole context of the organization, as well as the whole context of a client´s life. Based on our experience systematic approach to the stress prevention is significantly more effective than particular arrangements. It helps to reduce stress and cultivate the culture of the public transport organizations.

In the Czech public transport companies it seems to be more effective to outsource the stress prevention programmes and if possible, to let the drivers to remain anonymous.

Acknowledgement

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DRIVING PHOBIA TREATMENT - EXPERIENCE FROM THE CZECH REPUBLIC[*]

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Abstract

It is estimated that up to 20% of the population suffer from the driving phobia. Driving phobia is a serious and common problem that influences many aspects of client's life.

During the years 2012 and 2013 we had clients for both individual and group programmes of driving phobia treatment. There were 30 of the clients. 17 (2 men, 15 women) attended group programmes, 13 (12 women, 1 man) attended individual therapy.

Group programmes seem to be an effective tool of the driving phobia treatment. 12 of the 17 participants reported a significant symptom regress.

During the individual therapy many methods and approaches can be applied. For most of our clients driving phobia is rather a part of a more complex self-esteem problem than an isolated issue. We used various methods and approaches concerning the whole contexts of client´s life. In some of the cases people that our clients perceive as important (supporting) were also invited into the process of therapy. Practical training with the driving school instructor and psychologist seems to be another effective part of the therapy. 11 of the 13 of the participants of the individual programmes experienced a significant improvement of the symptom and most of them started to drive regularly.

Keywords: Driving phobia, Therapy, Anxiety, Social phobia, Self-esteem.

1. Introduction

15% of the general population of drivers feel anxiety and distress in connection with driving (Taylor et.al. 2008b). However mild fear from driving, especially is not unusual, especially with novice drivers. After all, driving a vehicle is a complex psychomotor process that is never completely safe. In some cases concerns can exceed a certain limit and can definitely exclude drivers from the group of active car users. Strong phobia from driving (amaxophobia) is not a rare problem. It affects 1 % of the population, mostly young women. Driving fear frequently appears as an accompanying symptom of agoraphobia. Furthermore 18-77% of people after a serious accident suffer by specific phobia (Taylor et.al. 2008b) and one quarter of people aged 55+ feel driving anxiety (Taylor, 2011). But most people with driving phobia do not meet the criteria for any of the mental disorders. The image typically combines agoraphobic symptoms, panic and specific phobia (Ehlers et.al., 1994, p 323).

Despite the fact that driving phobia can lead for example to unemployment and lower quality of life in the Czech Republic there is no discussion about fear or anxiety connected with driving. Scaring people even became a part of traffic safety campaigns. Many people do not know that they can get help. Also our work was firstly aimed at traffic offenders, but during our work with the drivers with problematic driving history, driving phobia turned out as a specific serious and common problem influencing many aspects of client's life.

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2. Methods

In the treatment of drivers with fear from driving primarily cognitive- behavioural approach (CBT) is applied. Especially exposures are usually associated with practical training under the supervision of a driving instructor. Methods of CBT are effective in treating post traumatic fear, especially if it was triggered by a traumatic experience, such as a traffic accident. Also hypnotic psychotherapy, systemic psychotherapy, gestalt therapy or combining of different techniques can be used. In many cases the effect of therapy depends on the cooperation of close persons. They play a key role in therapy, sometimes as a factor that feeds the fear, but also as a helping factor for the phobia elimination. That is why using of the family system therapy for driving phobia treatment has very good results, especially in cases where the phobia was not triggered by a single traumatic event. It appears that in some cases phobia procedure is associated with a variety of other personal problems and suffering. Therapy and scope often goes far beyond the elimination of fear as an isolated symptom.

During the years 2012 and 2013 we had clients for both individual and group programmes of driving phobia treatment. There were 30 of the clients. 17 (2 men, 15 women) attended group programmes, 13 (12 women, 1 man) attended individual therapy. Interview with clients was conducted right after the therapy and then 6 months later to evaluate the progress and also the efficacy of method. To take part in our driving phobia programmes client must fulfil some basic diagnostic criteria: a) fear of driving (self-reported); b) driving avoidance; c) anxiety symptoms while driving.

Individual therapy. During the individual therapy several methods and approaches were applied - gestalt therapy, systemic therapy, KBT and Erickson hypnotic psychotherapy. For most of our clients driving phobia is rather a part of a more complex psychological problem than an isolated issue. In many cases there is no obvious cause of the driving phobia. However in many cases we can find some traumatic experience that triggers the problem. It can be an accident, but more of our clients experienced trauma at a driving school, usually connected with the driving instructor approach. Very often we can see a general self-esteem problem which is often influenced by refusing parents. Parents or sometimes partners often feed the driving phobia symptoms and it was necessary to deal with them – mostly only as with the virtual elements. Where this is possible, those "phobia supporters" should be involved personally in the process of therapy. On the other hand most of our clients have had some important person supporting their driving attempts. It seemed very useful to invite those supporting persons to the therapy and involve them into practical training too. Usually we combined the therapy with the practical driving lessons with the driving school instructor as both practical skills training as well as a desensibilisation. Nevertheless it was also necessary to encourage the clients to drive without any assistance as soon as possible.

Group therapy. Besides the usual advantages of group, this approach has one more benefit - specifically for the Czech Republic. As was said above, the fear from driving is not a part of public debate or discourses. That is why these people are isolated and convinced that there is something wrong with them. They appraise as very helpful to see, that they are not the only one suffering from such problems. There were three sessions per 4 hours once in 14 days in this type of treatment and there was one session after 6 months. There was always homework between the sessions. On the first session we worked with expectations and goals and motivations for driving. There was also a thematic group "me and driving" where the problems with driving school, significant others and driving patterns were discussed. During the second session we worked on relaxation training, developing strategies on how to be fit to drive and clients undergo performance tests. On the last session a connection between driving and life(style) was discussed. People also got practical information about driving and traffic, mental hygiene and calming techniques.

3. Results

Based on our experience, driving phobia usually cannot be considered and treated as an isolated symptom. Very often driving phobia seems to be rather a symptom of more complex problem than an isolated issue. With our clients we found these starting factors: Lack of the self-esteem, family/relationships system and traumatic experience.

11 from 13 participants of the individual programmes experienced a significant improvement of the symptom and most of them started to drive regularly. We assume that lack of the whole context considering lowers the efficacy of the individual therapy. Group programmes for the people with driving phobia seem to be also an effective tool of the driving phobia treatment. 12 of the 17 participants reported a significant symptom regress after 3 sessions. Those, who had not had a driving licence before the therapy perceived the therapy as not helping and did not finish it.

4. Discussion and Conclusions

As the most effective clients mentioned following methods: setting the goals, setting up the small steps, plans for the future, talismans and promoting of the self-esteem. Setting the goals helped them to make realistic life goals and forced them to think about their needs and possibilities. Paradoxically the awareness that "not to drive" is a full option reduced the tension and led to higher motivation for driving. Setting the small steps helped with coping with the process. Plans for the future enabled including of significant others into the process of mastering the driving. Promoting of the self-esteem was done for example by traffic-psychological assessment that proved that the participants are competent enough. In the individual therapy various approaches were used and the therapy was more tailor-made. Overall conclusion is that therapeutic programmes are helpful and effective apart of the therapeutic approach. However concerning the whole context increases the efficacy. It is necessary to make further research, because our sample was small and our findings and results have a qualitative character.

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CAREER IDENTITY AND CAREER EXPLORATION AS PREDICTORS OF OCCUPATIONAL SELF-EFFICACY AMONG BRAZILIAN UNDERGRADUATES

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Abstract

Literature points the importance of self-efficacy beliefs in career studies since there is a positive relationship between these beliefs and the objective and subjective career success. This research aims to analyze the predictive power of two variables - career identity and career exploration - in occupational self-efficacy beliefs among Brazilian undergraduates in the process of university-to-work transition. It is understood by occupational self-efficacy the belief one has in your ability to properly perform their professional activities, reflecting in confidence about its performance. The method was quantitative. As instrument were selected tree scales from brazilian College Career Development Scale. Participated in this study 350 undergraduates of Brazilian higher education. The participants were from two different states (São Paulo and Mato Grosso do Sul), of both sexes, with a mean age of 25.8 years (SD = 6.6). The regression equation allowed explaining 37% of the criterion variable variance. Both career identity (β = 0.41) and career exploration (β = 0.35) were important for the explanation of occupational self-efficacy. The results suggest that the incorporation of occupational aspect to personal identity and career exploration behaviors are elements that contribute to building positive occupational self-efficacy beliefs. As self-efficacy self-regulating one's behavior, specifically the persistence in the face of obstacles, the results may be useful for planning programs to guide undergraduates in university-to-work transition.

Keywords: Self-efficacy, University-to-work transition, Career identity, Career exploration.

1. Introduction

For many undergraduates, school-to-work transition is the first career transition that they will experience in course of their career with more recognized consequences to their life-career development process. Despite the great importance of this topic in the career literature (e.g., vol. 47, 1999, The Career Development Quarterly), in Brazil, most of the university curricula do not include preparation for university-to-work transition (e.g., Teixeira & Gomes, 2004). Due to lack of experience, several graduate students are therefore under pressure to consolidate their professional identity (e.g., Koivisto, Nykyri & Vuori, 2007). Because this period is more a time of anticipation than a time of carrying out life projects, it is usual undergraduates feel lost and without references to sustain their sense of identity.

Taveira (2011) states that career exploration is a key element of personal construction. Career exploration can help the undergraduates make realistic and more informed career plans and decisions, as well as to adapt and grow in new work environments, in moments of transition from school-to-work. Teixeira, Bardagi and Hutz (2007) based on an empirical research review on career exploration found evidence that this variable is related to advance in career decision, career self-efficacy, realistic expectations, seeking opportunities behaviors and establishment in career.

Bandura (1977) defines self-efficacy as the belief that one can successfully execute actions required to produce the desired results. Such beliefs determine the level of motivation, trigger incentives to act and print a particular direction to actions. According to Pinquart, Juang and Silbereisen (2003) self-efficacy beliefs are related to objective and subjective career outcomes.

This paper aims to analyze the predictive power of two variables - career identity and career exploration - in occupational self-efficacy beliefs among Brazilian undergraduates who experience university-to-work transition. It is expected students in university-to-work transition process that work intentionally engage in career exploration, updating the descriptions about their capabilities and interests, building new dimensions of self-associated with an occupational role (career identity) and expanding their occupational self-efficacy beliefs.

2. Method

This is a quantitative-explanatory study. The sample includes 350 undergraduates of the last year of graduation from public and private universities in two different states of Brazil (São Paulo and Mato Grosso do Sul). The students were finishing their majors in Business (n = 50), Accounting (n = 76), Law (n = 83), Languages (n = 39) Education (n = 59) and Psychology (n = 43). Of these, 63% (n = 220) were female and 37 % (n = 130) were male, with ages ranging from 19 to 60 years (M = 25.8, SD = 6,63).

Participants completed tree sub-scales of the brazilian College Career Development Scale, (Teixeira, 2010) designed to assess (a) career identity, (b) career exploration, and (c) occupational self-efficacy.

The associations between the dependent and independent variables were assessed using multiple regressions analyzes.

3. Results

The results indicate that the proposed model explained 37% of the variance of the dependent variable - occupational self-efficacy (R = 0.61, R2 = 0.37, R2 adjusted = 0.37, p <0.001). Both career identity (β = 0, 41) and career exploration (β = 0, 35) were important for explaning occupational self-efficacy.

The amount reported by "Durbin-Watson" statistic, equal to 1.90, is an index favorable for the regression analysis showing that there are no auto-correlations. The statistic [F (2, 349) = 104.3, p < 0.0001] indicates rejection of the null hypothesis, indicating that it is unlikely that the regression coefficients obtained by multiple regression is due to chance.

Through the analysis of the indicators it is possible to infer that the independent variables - career identity and career exploration - together explain a significant portion of the variability of the scores of participants in occupational self-efficacy criterion variable.

4. Discussion and Conclusion

The results presented in this study confirm the hypothesis that the activation of career exploratory behavior and career identity during the transition from university-to-work influence positively occupational self-efficacy beliefs. It is believed that when the undergraduates are confident about on their ability to perform well in their profession they can motivate themselves to develop problem-solving skills, resilience and optimism to face the obstacles that are inherent to university-to-work transition. These results go against the statements made by Koen, Klehe and Van Vianen (2012) and may be useful for planning programs that guide undergraduates in university-to-work transition.

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WHAT FACTORS CAN ENHANCE DYNAMIC CAREER ATTITUDES OF UNIVERSITY STUDENTS?

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Abstract

In order to develop a University programme to prepare students for the demands of the job market our experimental study analyzes the relationships between the job search capabilities, the employability soft-skills, the domain autonomy of the quality of life and the dynamic career attitudes. During a class, 46 undergraduate students were invited to complete a self-administered paper pencil questionnaire that explores the Job search capabilities (JSC=26 items), Employability soft-skills (ESS 32 items), Quality of life autonomy domain (QoLA 4 items), and the Dynamic career attitudes (DCA 16 items). Each instrument was scored from 0 to 100. Correlation and multiple linear regression models were used for the analysis. 43 students have participated. (1) The JSC score is linked to the ESS score (r=0.561; p=0.000). (2) The ESS score, and QoL-autonomy scores are correlated to DCA score (r=0.644, p=0.000; respectively, r=0.595, p=0.000). Enhancing dynamic carrier attitudes could be stimulated with pedagogical workshops and interpersonal trainings developing students' autonomy and employability abilities.

Keywords: Career attitudes, Students, Autonomy.

1. Introduction

With an increasing number of university students entering the labour market (OCDE, 2011), graduates fail to distinguish themselves by being more active in furthering their career development creating opportunities to ensure their sustainable employability (Engelberg & Limbach-Reich 2011). An employment no typically requires a fixed set of competences, particularly over the longer term (McMahon et al. 2003). Nowadays, employers seek greater skills, ambition and energetic drive in their future employees. In this context to become competitive in the labour market, developing generic skills thru academic institutions is not the only issue facing students and graduates trying to obtain and sustain employment (Bridgstock, 2009); they also need a repertoire of active self-regulated career-oriented attitudes (Murphy & Ensher, 2001) helping them to cope successfully within their professional life. Researchers suggest that career attitudes have a strong effect on future career outcomes (career planning, career adaptability, career optimisms, and career-related knowledge) (Ng et al. 2005; De Vos et al., 2009) and also increase perceptions of employability. Also, employability skills are related to health behaviour, more specifically, to a person's, psychological quality of life (Baumann et al. 2013). In addition, graduates initially tend to have high expectations of themselves and their work ability (Lau & Pang, 2000). However, in the final year of their degree studies, students present some difficulties adopting an active approach to their careers (Jameson & Holden; 2000). From this perspective, our research aims to evaluate which factors most enhance the dynamic career attitudes of university students.

In order to develop a university programme University of Luxembourg initiated a project with the objectives to better prepare students for the first-time employment and to identify the determinants involved for successful entry into professional life. *Pass*

Carrier workshops were created helping students to acquire the skills adapted to the demands of the job market. To meet this purpose our experimental study analyzes the relationships between the self-perceived job search capabilities, employability soft-skills, autonomy domain of the quality of life and the dynamic career attitudes, focusing on university students in the final year of their first diploma.

2. Methods

All undergraduate students in applied management of 5th semester were invited to complete a self-administered paper pencil questionnaire in French. The questionnaire was composed of 4 instruments, including Dynamic career attitudes (DCA16 items), (dependent variable), Job search capabilities (JSC 26 items), Employability soft-skills (ESS 32 items), and Quality of life domain-autonomy (QoLA 4 items). For each instrument a score of 0 to 100 was calculated and an internal consistency coefficient alpha was obtained. Homogeneity of residual variance was tested and bivariate and adjusted partial correlations were used for association analyses. Standard multiple regression was performed to evaluate the relationships between independent variables and the dependent one DCA.

3. Results

Out of 46 students in the course, 43 participated in the study. Reliability of the instruments ranged from .63 to .93 indicating a relevant internal consistency with one homogeneous sample. JSC (α = .939) score has been positively correlated with ESS (α = .961), however its score is not linked to DCA (α = .772). But ESS and QoLA (α = .630) are positive related to DCA (figure 1). All of β coefficients were significantly different form zero except for JSC (table 1).

Figure 1. Determinants of Dynamic career attitudes .
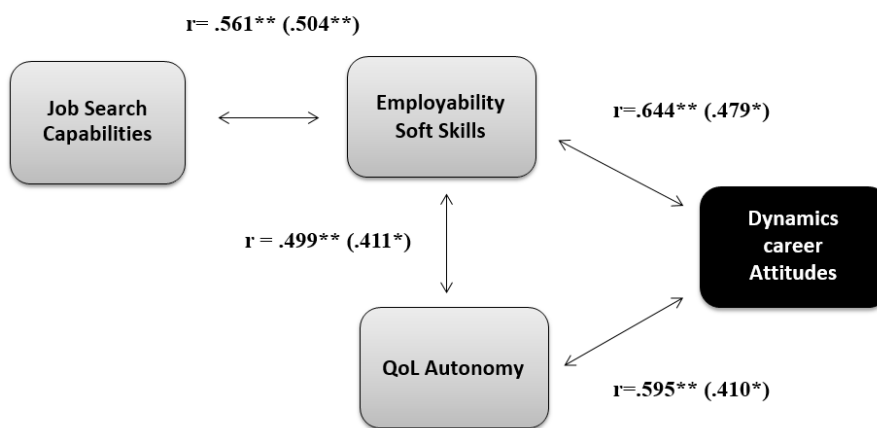
p <0.001**; p<0.05*; r=correlation / (ajusted partial correlation coefficients)

Table 1. Multiple regressions of the career outcome variables, and their effects on Dynamic Career attitudes.

DCA	Standardized coefficients β	t	p	VIF*
Intercept	.348	4,704	0,000**	
ESS	.511	3,404	0.002*	1.832
JSC	-.084	-0,625	0.535	1.463
QoLA	.360	2,810	0.008*	1.336

Adjusted R2 = 48.3%; F= 14.063; p <0.001** p<0.05*;
*The variance inflation factor indicates that the independent variables were not highly collinear (Myers , 1990).

4. Discussion and Conclusion

Students' employability soft skills were related to quality of life autonomy domain which together enhance their dynamic career attitudes. These could be improved with autonomous pedagogical workshops and interpersonal trainings in moving toward functioning, self-directed adults (Deci & Ryan, 2000). According to this, students with high dynamic career attitudes would be more likely be able to make their own decisions and influence what happens in their life, manage their career development and resist social and professional pressures. The constructs studied in the present study seem to provide a useful theoretical framework for increasing student's career outcome however since it was limited to a small sample of undergraduate students the findings cannot be generalized to other contexts. Further investigations need to be replicated within larger samples across various academic groups.

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FACIAL EMOTIONAL RECOGNITION IN SCHIZOPHRENIA: PROPOSAL OF A PROGRAM USING VIRTUAL REALITY

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Abstract

Background and Aim: Virtual reality offers great potential for the assessment and training of skills in people with mental illness, such as schizophrenia. It can be easily manipulated, providing almost real time results with maximum ecological validity of stimuli. This study aims to evaluate the effectiveness of an emotional recognition assessment and training program, the VR-REF. This program integrates an innovative and interactive methodology, based on primary emotions using avatars featured in social interaction's context, aimed to improve the quality of life of individuals with chronic and disabling mental illness.
Methods: 3D avatars reproducing 6 emotional expressions were built and integrated in 3D virtual environments. Each avatar was presented to a group of 24 adults (12 persons with schizophrenia and 12 without psychiatric pathology). Assessment was developed with correct responses and EEG (according to Davidson´s emotional model).
Results: Data from emotional facial recognition task and frontal electroencephalography (power qEEG in F3 and F4) showed that joy and anger were the expressions more recognized by all participants, while fear and disgust presented greater difficulty. Changes in the frontal alpha activity of the stimuli anger and disgust were found among persons with schizophrenia, although inconsistent with brain lateralization related with the emotional stimulus' valence.
Conclusions: Although some avatars' emotional expressions must be improved, VR-REF program seems to be useful for emotional facial recognition assessment and rehabilitation. This is a technical resource for services of mental health that will be tested with larger samples of patients, to improve emotional details of the stimuli.

Keywords: *Virtual reality, Recognition of facial emotion in 3D avatar, Schizophrenia, Power (QEEG) Alpha rhythm.*

1. Introduction

Over the past decades the interest on mental diseases, specifically on those that are characterized by chronicity and major deficits that affect significantly life quality of the individuals, has increased. The worldwide prevalence of schizophrenia is estimated to be between 0.5 a 1.5% and it becomes one of the most important public health problems in the modern world. According to the World Health Organization (WHO, 2008), it lies in ninth position in the world ranking for all medical illnesses.

Schizophrenia affects differently each individual, provoking persist and multidimensional deficits with a prolonged evolution that decreases the quality of physical, psychological or social life (e.g. increased weigh, apathy, social exclusion, unemployment). The treatment assumes nuclear importance and initially is associated with psychopharmacology. However to be efficient it must include rehabilitative approaches that helps the patient to achieve the highest level of personal, family, work and social functioning, in a least restrictive environment possible (Direcção Geral de Saúde, 2004). Several studies revealed, among of patients with schizophrenia, social

cognition difficulties, especially in emotional recognition and social perception, communication and interpersonal relationships, what contributes to social exclusion (Bellack et al., 2004; Souto et al., 2013). According to Ekman and Friesen (2003) emotions play a key role in human communication, and virtual reality offers great potential for the assessment and training of skills in people with mental illness, such as schizophrenia. Virtual reality application to mental health enlarges the presents limitations of intervention, because it provides scenarios more closely related with daily life activities (Carvalho, Freire & Nardi, 2008), and uses customized and controlled settings more suitable for experimental and therapeutic contexts (Dyck et al., 2010). Additionally, the support given to diagnosis and evaluation are also present when this technological resource is used (Wendt, 2011).

2. Design and Objectives

This is an exploratory and experimental study that aims to evaluate the effectiveness of an emotional recognition assessment and training program, the Virtual Reality Recognition of Emotional Faces (VR-REF). This program integrates an innovative and interactive methodology, based on Ekman 6 basic emotions using avatars featured in social interaction's context, aimed to improve the quality of life of individuals with chronic and disabling mental illness. The program was developed using a modular structure so that it can promote generalization and transference of acquisitions made by the individual to his real-life context, respecting the individual evolution stage during the task. In this paper, we discuss results of the first module, assessment of emotional recognition, using a "main avatar" that express facial emotion, and a second avatar ("cicerone") in a virtual environment (a living room). It is the full body human avatar ("cicerone") that introduces the participant to the task and that after the explanation, presents the three-dimensional faces on a screen on the wall of the virtual room, reproducing each emotion during 7 seconds, elapsed time from neutral emotion, through expressed emotion and returning to neutral.

3. Methods

3.1. Participants

Two distinct groups were involved: 12 persons with schizophrenia and 12 without psychiatric pathology (reference group), both groups with 75% male, similar school degree and mean age of 36.3 years. Reference group had 33% of unemployed participants, while 75% participants with schizophrenia were unemployed.

3.2. Instruments and Procedure

A questionnaire for socio-demographic and disease characteristics was used, and both groups were rated during the emotional recognition task using the number of correct answers, the type of errors, and the *power* (qEEG) of electroencephalogram alpha activity in the electrodes F3 and F4. According Davidson (2003) asymmetry model this verifies if different emotions expressed by the avatars induced specific electroencephalographic changes during their presentation. Data were collected at PING´S laboratory (Porto Interactive NeuroScience Group, Porto, Portugal), in a single session of 30 minutes per participant. Initially, before completing the emotional recognition task, they were informed that they had to fill out questionnaires and that afterwards, on the screen, a 3D movie would be presented and that during the presentation, the use polarized glasses and monitoring by EEG were necessary.

4. Results

Regarding emotional recognition task, we found a variety of correct answers for the 6 facial emotional stimuli, and using non parametric test *Mann Whitney U* (due the

small number of participants), no significant differences were found between groups, despite a worst global performance of the schizophrenia group. Joy and anger were better recognized while fear and disgust were worst recognized. Power qEEG in F3 and F4 showed among schizophrenia group changes in the frontal alpha activity during anger and disgust, although inconsistent with brain lateralization related with the emotional stimulus' valence. No correlation was found between correct emotional recognition and age (*rho* Spearman) despite schizophrenia group present negative correlation while reference group presents positive correlation.

5. Conclusion

Although some avatars' emotional expressions must be improved, VR-REF program seems to be useful for emotional facial recognition assessment and rehabilitation. This technical resource for mental health services needs to be tested with bigger samples of adult patients, and to improve emotional details of the stimuli, it can also be combined with other research developed with children with Autism Spectrum Disorder such as LifeIsGame project that tries to learn emotions using a serious game (Alves et al., 2013), or using contextual cues to help patients to better recognize emotions (Silva et al., 2013). The qEEG brain maps will allow to use neurofeedbak training and the different virtual reality settings will increase the ecological validity of the procedure, trying to simulate daily life situations. As referred by several studies (Bellack et al., 2004; Direcção Geral de Saúde, 2004; Souto et al., 2013), emotional recognition is an important key for social inclusion, and this one is crucial to improve the quality of life of individuals, support, as it can be helpful to improve social skills after having trained them using virtual reality simulated scenarios.

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THE AGONY OF LONELINESS OF CANCER PATIENTS & THOSE WHO CARE FOR THEM

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Abstract

Research suggests that cancer patients and their caregivers may be particularly vulnerable to the experience of loneliness. The current study compared the experience of loneliness and perceptions of social support from significant others, friends, and family amongst individuals afflicted with cancer, their caregivers, and related members from the general population. Analyses revealed that patients and caregivers reported lower loneliness subscale scores and higher social support than members of the general population.

Keywords: Loneliness, Cancer, Caregivers, Support, Illness.

1. Introduction

Loneliness represents a common and major psychosocial concern for patients with cancer. Cancer patients are at particular risk for feelings of loneliness, with one study finding that nearly 50% of cancer patients reported the experience of loneliness.

There are several reasons as to why loneliness may be experienced, and in unique ways, by individuals living with cancer. Firstly, living with cancer may be psychologically isolating, causing sufferers to feel critically different from the rest. Secondly, the physical detachment that may accompany cancer may also fuel a sense of loneliness.

Informal caregivers may also be at risk for loneliness. Although there is very little research in this area, there are several reasons as to why caregivers may experience loneliness. Informal caregiving is often a mentally, socially, and emotionally overwhelming experience that can engender a profound sense of loneliness. The demanding nature of caregiving can disrupt one's working schedule, family life, and social relationships, thus rendering it difficult to maintain desired levels of social involvement. Undertaking the role of sole primary caregiver (as is often the case), may also leave caregivers feeling unsupported by family and friends, thus compounding their sense of loneliness. Finally, helplessly witnessing the suffering of a loved one, while simultaneously facing one's own mortality, may result in feelings of loneliness that take the form of alienation from the rest of the healthy and bustling society.

As loneliness may represent a common outcome for both individuals living with cancer and their caregivers, it is important to expand and diversify our understanding of the relationship between cancer and loneliness by examining the loneliness experience multidimensionally. Thus, the central goal of the present exploratory study was to compare the extent to which cancer patients, their caregivers, and individuals from the general population experience various components of the loneliness experience.

2. Method

2.1. Participants

A total of 426 participants volunteered to partake in the study—159 men and 281 women, with six participants not reporting their gender. The average age of all participants was 41.5 years, with ages ranging between 16-84. The mean level of education (i.e. last grade completed) was 14 years with a range of 8-24. From those patients who did report the particulars of their illness (44% of the participants), they reported having the following types of cancer: Sarcoma (26%), thyroid cancer (1%), metastatic bone disease (4%), uterine cancer (1%), colon cancer (6%), cardiac cancer (1%), breast cancer (3%), and bone marrow cancer (2%).

2.2. Procedure

Each patient being hospitalized for cancer treatment and his/her caregiver were approached in the patient's hospital room by the departmental head nurse (one of the authors) and asked to participate in a study investigating loneliness and support. After informed consent was obtained, participants were then asked to complete a battery of measures including a demographic questionnaire, and measures of loneliness experience and perceived social support. Patients and caregivers filled out the questionnaires independently.

The control group was approached at the same time period as the patients and their caregivers. They were asked to participate in a study on loneliness, cancer, and caregiving.

2.3. The Loneliness Questionnaire

To measure the multidimensional experience of loneliness, the Loneliness Questionnaire was used (Rokach, 2004). It is a yes/no questionnaire consisting of statements that describe various facets of the loneliness experience. The scale was developed using both qualitative and quantitative techniques, with item development based on interviews with 526 individuals during which they described their experience of loneliness. Factor analyses were then performed to uncover the caregiver subgroups on the three loneliness subscales of Emotional distress, Social inadequacy and alienation, and Interpersonal isolation. While unexpected, this pattern has, in fact, been demonstrated in previous research examining the loneliness experience of HIV/AIDS patients.

3. Conclusions

To conclude, the present results revealed that on all but the Growth and discovery and Self-alienation subscales, both those directly and indirectly affected by cancer experienced various facets of loneliness to a significantly lesser degree relative to the general population, which was moderated by perceived social support from friends and family. Individuals who cope with ill health face serious psychosocial strains to their relationships with those who comprise their close social network. While living with cancer is by no means a desirable experience, our findings, however, offer a favourable juxtaposition to prevalent current understandings of what it is like to live with, or care for someone living with cancer. In a time of crisis and negativity, our findings show that positivity can and does transpire, at least within the interpersonal realm.

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DIFFERENCES RECOGNIZING THE EMOTIONAL FACIAL EXPRESSIONS OF DIVERSE RACES IN KOREAN CHILDREN AND UNDERGRADUATES

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Abstract

This study was performed to answer the following two questions: First whether there were age differences in recognizing the emotional facial expressions of various races. Second, whether the ability to recognize the motional facial expressions was related to peer relationship and empathy in 5th to 6th grade children.

Two hundred fifty-seven Korean children in the 5th and 6th grade and 120 undergraduates were participated. Recognition of emotional face recognition was measured using 64 pictures of facial expressions (Happy, sad, angry, fear) of 4 different races (Caucasian, African-American, Southeast Asian, and Korean). Peer relationship was measured using self-report questionnaire of Peer relationship inventory, and empathy was measured using self-report Korean version of EQ-C and IRI. The results of this study were as follows.

Firstly, recognition of emotional facial expressions was better in undergraduates than in 5th to 6th grade children. Secondly, there were differences in recognition of emotional facial expressions in various races, and the differences were greater in children than in undergraduates. The recognition of Korean facial expression was higher than that of other races, and among other races, recognition of Southeast Asians was better than that of Caucasians or African-Americans. Finally, recognition of emotional facial expressions was positively correlated with peer relationship and empathy in Korean children.

It demonstrated that children better in recognizing emotional facial expression had better peer relationship and higher empathy. The results suggest that the recognition of emotional facial expressions of diverse races might contribute to the social functioning in multicultural societies.

Keywords: Facial emotion recognition, Empathy, Peer relationship, Multi-culture.

1. Introduction

Facial expressions that the best represent the emotional state had been demonstrated in several studies (Ekman, 1982; Mehrabien, 1972). The ability to judge emotion in facial expressions begin to develop from a very early age and increase with age becomes more precise and sophisticated (Haviland & Lelwica, 1987; Termine & Izard, 1988).

Facial emotion recognition abilities had been found related to social skills (Kim & Ghim, 2009; Edwards, Manstead & MacDonald, 1984). For example, school-age children's ability to recognize emotions and peer relationships play an important role in school adjustment. Some studies suggested that there was a positive relationship between children's emotional recognition accuracy and social competence (Philippot & Feldman, 1990), peer relationship (Edwards et al, 1984; Vosk, Forehand, & Figueroa, 1983).

This study was performed to answer the following two questions: First whether there were age differences in recognizing the emotional facial expressions of various races. Second, whether the ability to recognize the motional facial expressions was related to peer relationship and empathy in 5th to 6th grade children.

2. Methods

2.1. Participants

This study encompassed two different groups, primary school students and

undergraduate students. Two hundred fifty-seven (119 boys, 138 girls) Korean children in 5th and 6th grade recruited from local primary school were participated. A hundred twenty (54 men, 66 women) undergraduates were participated. Participants in this study voluntarily agreed to participate.

2.2. Instruments
2.2.1 Emotional face recognition task
Recognition of emotional face was measured using pictures of Caucasian, African American, Southeast Asian and Korean faces(see Figure 1). The pictures of Caucasian, African American, Korean faces had been culled from the Baron-Cohen (2007), and Park & Ghim(2010). Southeast Asian faces were extracts from the Southeast Asian movies. In order to measure emotion recognition used four kinds of facial expression, Happy, sad, angry and fear.

Figure 1. Example of emotional face photos (from the top left Caucasian joy, African American anger, Southeast Asian sad and Korean fear).

2.2.2. Peer relationship inventory
Peer relationship was measured using the Peer Competence Questionnaire (Youn, 2010). This 15 itmes consists of three subscales, sociability(SA), prosociality(PA) and initiative(IA). An example of a sociability item would be "No matter what I do, I'm popular with other children", an example of a prosociality item would be "When a friend is hard, I help a friend" and an example of initiative item would be "When I play with friends, I led the activities".

2.2.3. Empathy inventory
Empathy was measured using self-report Korean version of EQ-C(Cha, Ghim, Yi, Eom & Lee,2011) and Interpersonal Reactivity Index (IRI; Davis, 1983).
EQ-C scale : This 22 items were based on 4-point Likert scale scores. This scale was designed to measure the degree to which a person understand and shares emotional state of other people and assessed cognitive empathy(CE), emotional empathy(EE) and social skills(SK).
IRI scale : The IRI is 21-item self-report questionnaire that were based on 5-point Likert Scale scores. This scale maesures both cognitive and emotional empathy and contains three subscales (the perspective taking;PT , the fantasy scale;FS and emotional contagion;EC).

3. Result

Accuracy of emotional facial expressions was better in undergraduates (Caucasian: African American: Southeast Asian : Korean = 69.38%: 57.50%: 73.75%: 75.63%) than in 5th to 6th grade children(Caucasian: African American: Southeast Asian: Korean = 61.09%: 51.65%: 66.34%: 72.72%). There were differences in recognition of emotional facial expressions in various races, and the differences were greater in children than in undergraduates. The recognition of Korean

facial expression was higher than that of other races, and among other races, recognition of Southeast Asians was better than that of Caucasians or African-Americans.

Table 1 shows the relationship between accuracy of emotional facial expressions and scales in Korean children (*N*=257). Recognition of emotional facial expressions was positively correlated with peer relationship and empathy.

Table 1. Emotion recognition accuracy and peer relationships, empathy correlation coefficient.

	Peer Relationship				EQ-C				IRI			
	Total	SA	PA	IA	Total	EE	CE	SK	Total	FS	PT	EC
Total	.21**	.14*	.23**	.17**	.20**	.16*	.13*	.14*	.22**	.15*	.25**	.17**
Other Race	.24**	.17**	.25**	.21**	.21**	.16**	.17**	.13**	.23**	.16*	.26**	.17**
Korean	.00	.01	.03	.01	.06	05	.03	.08	.07	.03	.08	.07

Note: **p≤ .01; *p≤ .05

4. Discussion

It demonstrated that children better in recognizing emotional facial expression had better peer relationship and higher empathy. The results suggest that the recognition of emotional facial expressions of diverse races might contribute to the social functioning in multicultural societies.

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CREATING THE FORBIDDEN FRUIT: THE IMPACT OF HEALTHY EATING GUIDELINES ON EATING BEHAVIOUR AND MOOD

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Abstract

This study investigated whether adhering to the UK Eat-Well Plate eating guidelines for a healthy diet for three days was associated with an increase in food cravings, negative emotions, food preoccupation, body dissatisfaction and binge eating among non-dieters. Six men and four women (mean age 35.1 ± 17.5 years) participated in the study. Food diaries (including cravings) and daily mood assessments were completed over the three days of adhering to the Eat-Well Plate guidelines. Measurements of mood, food preoccupation, food cravings inventory and body dissatisfaction were completed at baseline, at the end of the Eat-Well Plate period and one day after intervention, i.e. not having to adhere to the Eat-Well Plate guidelines. Binge eating was only assessed at the end of the free-eating day. One-way repeated measures Anovas showed that subjection to the Eat-Well Plate diet did not influence food preoccupation and body dissatisfaction. Also, binge eating failed to correlate to dietary restraint. Nevertheless, participants reported significantly ($p \leq 0.05$) more food cravings and depression ratings at the end of the Eat-Well Plate dietary period than at baseline. Craved foods were high in fat, sugar and alcohol for both men and women, which was the food group required to be restricted in the Eat-Well Plate guidelines. These results support the association between dietary restriction and food cravings and suggest the need to investigate the impact of a chronic exposure to the Eat-Well Plate guidelines on eating behaviours and mood in a larger scale, tightly controlled intervention study among the non-dieters' population.

Keywords: Food cravings, Healthy eating guidelines, Eating behaviour, Emotional eating.

1. Introduction

The UK's national food guide, the eatwell plate, consists of healthy eating guidelines and has been part of a strategy devised by the government nearly 20 years ago to reduce the prevalence of obesity (Harland *et al.*, 2012). The recommendations aimed to decrease the population's consumption of energy from total fat to not exceed 35% and saturated fatty acids to 11% per day (Hunt *et al.*, 1995). Total fat intake has been met but not saturated fat with still 12.8% (UK's National Diet and Survey data cited by Harland *et al.*, 2012). One of the recommendations helping to achieve these governmental aims is represented by the smallest segment of the plate (8%) and set as *"Try to eat just a small amount of foods and drinks high in fat and/or sugar"* (Public Health England, 2013). Despite the development of the eatwell plate, about 60% of the English adult population are now overweight or obese (Department of Health, 2013) with health consequences and high costing to the National Health Service. Many adults fail to adhere to the government's dietary recommendations (Giskes *et al.,* 2011), but the motive remains ambiguous and inconclusive. The effectiveness of the eatwell plate dietary intervention on increasing healthy eating and reducing obesity can thus be questioned, yet no researchers have evaluated the impact of these dietary recommendations on individuals' cognitions and eating behaviours. The aim of current study was therefore to see whether the eatwell plate diet would be associated with the eating behaviours and cognitions that are found to be influenced by dietary restraint in an attempt to provide a possible explanation for the continuing rise in obesity rates.

2. Method

Ten adult participants (mean age 35.1 ± 17.5 years), 6 males and 4 females, from the general population who were not currently dieting for weight loss participated in the study. A repeated measures design through 3 conditions over the course of 5 days was employed. Time 1 consisted of baseline measurements before the intervention; Time 2 were 3 days of complying to the eatwell plate guidelines and secondary measurements were carried out at the end of this period; and Time 3 was the day after the diet, i.e. no longer required to follow the eatwell plate but to continue recording food cravings and intakes. Tertiary measurements were collected at the end of Time 3 (free-diet day). The study started on a Monday and ended on the subsequent Friday to prevent the influence of individuals' weekend eating and drinking habits on their dietary records. Questionnaires employed for baseline, secondary and tertiary measurements were: *Three Factor Eating Questionnaire* (TFE-Q, Stunkard & Messick, 1985); *Food Cravings Inventory* (FCI, White *et al.*, 2002); *Body Image Assessment Scale* (Thompson & Gray, 1995); *Food Preoccupation* (Tapper & Pothos, 2010) and *Emotional Eating Scale* (EES, Arnow *et al.*, 1995). A *Background Questionnaire* gathered anthropometric measurements and physical activity level. Food consumption and cravings for the 3 days of the diet and the following free-diet day were recorded in a *food diary*. Mood was assessed at the end of each day of the diet period via EES. Participants were given at baseline an information sheet on daily dietary requirements and on how to adhere to the eatwell plate guidelines for the next three days. The *Bulimia subscale* of the Eating Disorder Inventory (EDI, Garner *et al.*, 1983) was completed at the end of the study (free-diet day) for objective measurements of binge eating. A one-way repeated measures ANOVA was carried out on each questionnaire. Bonferoni's post-hoc multiple comparisons test was used to identify time points where any significant changes took place. For all statistically significant analyses the *p* value was set at ≤ .05. Self-reported food/drink intakes from the food diaries were analysed using the British Heart Foundation Eat-Well Portion Guide (2009) to see if participants had adhered to the eatwell plate recommendations.

3. Results

Adhering to the eatwell plate guidelines for three consecutive days did not significantly influence TFE-Q, food preoccupation and body dissatisfaction. However, mean tendencies showed an increase at the end of the dietary restriction period from baseline measurements, and a decrease the day after the diet. In addition, binge eating failed to correlate to dietary restraint. Nevertheless, participants reported significantly more food cravings (FCI-T, Table 1) and Depression EES subscale ratings (Table 2) at the end of the eatwell plate diet than at baseline. Both FCI-T and Depression scores decreased as the diet ended. Foods high in fat and sweets and also alcohol were found in the food diary to be craved confirming data from FCI. However, cravings ceased on the day after the diet and consumption of these foods was excessive to the guidelines. Food diaries also showed dietary compliance of fruit and vegetables however, once the restriction ended intake dramatically decreased below to the guidelines.

Table 1. Food Cravings Inventory-Total (FCI-T) scores reported at Times 1, 2 and 3 († - post hoc results (*p*=.046).

	Time 1 - baseline Mean ± SD	Time 2 – end of diet Mean ± SD	Time 3 – free-diet Mean ± SD	*p* value * (significant at .05)
FCI-Total	**20.4 ± 9.5 †**	**21.7 ± 10.1 †**	19.7 ± 9.6	**.041***

Table 2. Depression EES subscale scores reported at Times 1, 2 and 3 (*p value sig at ≤ .05; †
- post hoc results, p = .046).

	Baseline Mean ± SD	Day 1 of diet Mean ± SD	Day 2 of diet Mean ± SD	Day 3 end of diet Mean ± SD	Day 5 free-diet Mean ± SD	p value
Depression	19.3 ± 5.7 †	23.6 ± 6.0	22.4 ± 6.2	24.4 ± 6.3 †	20.8 ± 5.4	.013*

4. Discussion and Conclusion

Major findings were that participants exhibited significantly higher FCI scores and self-reported food cravings during the eatwell plate diet. Cravings were of high-fat/high-sugar foods and alcohol which were suggested to be consumed within limited amounts by the eatwell plate. Although participants adhered to these advices the consumption of these foods was excessive once the restriction was over, which is in agreement with the restraint theory (Herman & Polivy, 1980). Depression also increased as the diet progressed and decreased once it was over. Significant changes in negative mood states were also found by Wells *et al.* (1998) however more recent research has failed to identify the association between dietary restraint and the development of negative emotions. Johnson and Wardle (2005) found high levels of body dissatisfaction to be a stronger mediator of depression than dietary restriction.

In conclusion, the eatwell plate may generate counterproductive food-related cognitions and eating behaviours, which may cause an inability to successfully regulate dietary intake. Although dietary restraint failed to correlate to binge eating, the analysis of food diaries indicated high levels of restriction compliance and excessive consumption of the limited foods once the diet was over. The link between dietary restraint, body dissatisfaction, food preoccupation and binge symptoms was however undetectable possibly due to the small sample size and the short period of time in which the adherence to the eatwell plate guidelines took place. Nevertheless, significant increases in depression and food cravings for the restricted food groups were detected, both of which may increase susceptibility to emotional and disinhibited eating patterns. Hence, eating messages should be transmitted stressing health benefits to potentially avoid being misunderstood as restriction.

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TOBACCO CONSUMPTION AND INTENTIONS TO QUIT SMOKING AMONG HEALTH PROFESSIONALS

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Abstract

Healthcare professionals have the mission to advise and help people suffering addictions, as well as being models for their patients. The advice of healthcare professionals is considered very important in helping people to cease smoking. However, if they themselves are smokers it is more difficult to exercise this role. This study examined the prevalence of smoking in a sample of healthcare professionals by age, gender and profession. The research also investigated their intentions regarding quitting smoking in the near future. The target population was healthcare professionals working in the 23 primary healthcare services in the province of Girona (Spain). Cluster sampling was used to randomly select 10 primary healthcare services. The final sample consisted of 195 healthcare professionals who worked in the selected services. The prevalence of tobacco consumption was 16.8%. Of the remainder, 27.9% were ex-smokers and 55.3% had never smoked. No significant differences were found by gender, profession (doctor/nurse) or age. Only 6.2% of the current smokers had the firm intention to quit smoking within 30 days. Although the prevalence of tobacco consumption among healthcare professionals is lower than in the general population, actions must be taken to help this group to quit this harmful habit, not only because they are putting their own health at risk, but also because of their substantial influence on the general population.

Keywords: Tobacco consumption, Health Professionals, Quitting smoking.

1. Introduction

Globally smoking is the leading cause of premature and preventable death; each year tobacco consumption kills six million people and cost more than half a trillion dollars (WHO, 2013).

The role of healthcare professionals is crucial in advising and helping people suffering from addiction (Baltasar, 2012). According to the results of the Spanish National Health Survey, 13.9% of smokers reported having quit smoking due to advice from healthcare professionals (INE, 2012). In addition, the cost of this advice in time and money is very low. However, if healthcare professionals are themselves smokers, it is more difficult to exercise the role of advisers (Vázquez et al., 2006).

2. Objectives

The aims of this study were to: 1) Identify the prevalence of smoking in a sample of healthcare professionals by age, gender and profession, and; 2) To examine their intentions of quitting smoking in the near future.

3. Methods

3.1. Sample

The target population was healthcare professionals working in the 23 primary healthcare services in the province of Girona (Spain). Cluster sampling was used to randomly select 10 basic health centers. The final sample consisted of 195 healthcare professionals who worked in the selected services. Almost half (47.2%, n = 92) of the sample were doctors, 51.3% (n = 100) nurses and 1.5% (n = 3) did not report their profession. By gender, 72.7% (n = 136) were females, 27.3% (n = 51) males and 4.1% (n = 8) did not report their gender. Age ranged from 21 to 65 years old (Mean age = 45.27; SD = 9.67).

3.2. Design and variables

A cross-sectional survey was carried out. We evaluated gender, age and profession. Furthermore we asked if they were currently smokers, non-smokers or ex-smokers, how many cigarettes they smoke every day approximately (10 or less, between 11 and 20, between 21 and 30 and more than 30), and in case they were smokers, if they were thinking about quitting this habit in the next 30 days or in the next six months.

3.3. Data analysis

A chi-square test was used to analyse the relationships between categorical variables and a one way ANOVA was used to compare means.

4. Results

The prevalence of tobacco consumption was 16.8%. Of the remainder, 27.9% were ex-smokers and 55.3% had never smoked. Table 1 shows this prevalence by gender, and profession. Although more females, than males, and more doctors, than nurses, reported being smokers these differences are not statistically significant (Gender: $X^2 = 2.1$; p>.05; Profession: $X^2 = 1.6$; p>.05). Furthermore, the result of the one way ANOVA did not find significant differences in the mean age of smokers, ex-smokers and non-smokers (F=2.14; p>.05).

Table 1. Smoking status by gender, profession and age

	Smokers	Ex-smokers	No-smokers
Male	14.6%	35.4%	50.0%
Female	17.9%	24.6%	57.5%
Doctors	20.5%	25.0%	54.5%
Nurses	14.1%	30.3%	55.6%
Mean age	46.4	46.9	43.8
SD	9.9	8.1	10.1

Over half (56.3%) of tobacco consumers smoke 10 or less cigarettes every day, 37.5% smoke between 11 and 20 and 6.3% (n=2) between 21 and 30. Nobody reported a consumption of more than 30 cigarettes diary. Table 2 shows consumption by gender and profession. Chi-square tests did not find significant differences in the number of cigarettes smoked every day by gender ($X^2 = .8$; p>.05) or profession ($X^2 = 3.1$; p>.05). Furthermore, there was no significant difference in mean age according to the number of cigarettes smoked each day (F=1.4; p>.05).

Table 2. Number of cigarettes smoked each day by age, sex and profession (n=32)

	10 or less	**11 - 20**	**21 - 30**
Male	57.1%	42.9%	0 %
Female	58.3%	33.3%	8.3%
Doctors	55.6%	44.4%	0 %
Nurses	57.1%	28.6%	14.3%
Mean age	44.2	48.3	55.0
SD	11.2	7.3	4.2

Only two current smokers (6.3% of the smokers; both doctors; one female and the other unknown) had the firm intention to quit smoking within the next month. Furthermore, 12 current smokers (35.7% of the smokers) had the firm intention of quitting smoking within the next six months. Although more females (37.5%) than males (28.6%) had the intention to quit smoking within the next six months, this difference was not significant (X^2=.2; p>.05). Nevertheless, significantly more nurses (57.1%), than doctors (22.2%), had the intention to quit smoking in the next six months (X^2= 4.1; p<.05).

5. Discussion and conclusions

The prevalence of tobacco consumption among healthcare professionals was 18.6%. This figure was lower than the reported by the Spanish National Health Survey for adult general population (INE, 2013). No differences were found by gender, age or profession according to the status of consumption or the number of cigarettes smoked daily. Only two doctors were thinking about quitting smoking in a very near future, but almost six out of ten nurses (and two out of 10 doctors) had the firm intention of abandoning the habit within the next six months.

Actions must be taken to help health professionals to quit this harmful habit, not only because they are putting their own health at risk, but also because of their substantial influence on the general population.

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EMOTIONAL PROCESSING, SOCIAL KNOWLEDGE AND THEORY OF MIND FUNCTIONING IN SCHIZOPHRENIA OUTPATIENTS

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Abstract

Social cognition is one of the core impaired cognitive domains that characterize schizophrenia (Savla, Vella, Armstrong, Penn and Twamley, 2013). At the same time it is one of the most relevant factors in the prediction of social functioning. However, although social cognition deficits are well established in the literature, most of the studies have focused on inpatients and less attention has been devoted to stable outpatients with many years since the illness onset. Social cognition includes five domains: Theory of Mind (ToM), social perception, social knowledge, attributional bias and emotion processing. Our goal was to compare a group of schizophrenic stable outpatients with a healthy control group in ToM, social knowledge and emotion processing (identification and discrimination of emotions). Fifteen outpatients and 15 healthy controls matched in age and education level were given the "Hinting task" to measure ToM, the "Schema component sequencing task-revised" to assess social knowledge, and the "Face emotion identification" and "Face emotion discrimination" tests to assess emotion processing. Moreover both groups were compared in social functioning using the Social Functioning Scale. Results showed differences between the two groups in social knowledge and ToM but not in emotion identification and emotion discrimination.

Keywords: Social cognition, Schizophrenia.

1. Introduction

Social cognition is one of the core impaired cognitive domains that characterize schizophrenia (Savla, Vella, Armstrong, Penn and Twamley, 2013). Social cognition involves our ability to predict, monitor, and interpret the behaviours and mental states of other people (Green et al., 2008). In the last 10 years social cognition has become a high-priority research topic because evidence has revealed that social cognition explains functioning and that deficits in social cognition have a direct impact on relapse rates (Brekke et al., 2005; Fett et al., 2011).

Social cognition is a multicomponent concept including five key different domains: *Emotion processing* refers broadly to aspects of perceiving and using emotions. *Theory of mind (ToM)* refers to the ability to understand that others have mental states that differ from one's own and the capacity to make correct inferences about the content of those mental states. *Attributional bias* refers to how individuals characteristically explain the causes for positive and negative events in their lives. *Social perception* concerns person's ability to judge social cues from contextual information and communicative gestures, including awareness of the roles, rules, and goals that typically characterize social situations and guide social interactions. *Social knowledge*, also called social schema, is linked to social perception and refers to the ability to identify the components that characterize a social situation (Green and Horan, 2010).

Several studies and meta-analyses have demonstrated deficits in the different domains of social cognition across the different phases of the illness (Hedge's g effect sizes range from 0,50 to 1,00) (Green et al., 2012; Savla et al., 2013). However the profile of social cognition deficits in chronically stable outpatients still remains incomplete. Recent review studies focused in social cognition show that illness mean

duration in the schizophrenic samples is 12 or fewer years. The aim of this study is to compare a chronically stable outpatient sample of schizophrenic patients with a healthy control group in the social cognition domains of emotion processing, ToM and social knowledge. Additionally, scores in these domains were related with social functioning.

2. Method

2.1. Participants

The study included 15 outpatients with the diagnosis of schizophrenia and 15 healthy controls. All patients met the DSM-IV criteria for schizophrenia according to the Structured Clinical Interview for DSM-IV Axis I Disorder (SCID-1) and were clinically stable, with an IQ above 85, no organic cerebral disease and no substance abuse or dependence. Antipsychotic medication type and dose was stable in the previous 3 months for all patients. Every patient was given: the reduced version of the WAIS-III (Fuentes et al., 2010) to assess intellectual functioning; and the Brief Psychiatric Rating Scale (BPRS) to evaluate symptomatology.

Healthy control participants were recruited via advertisements in the community and were screened for exclusion criteria: history of psychotic or affective disorder, IQ below 85, substance abuse or dependence, and organic cerebral disease. Control participants were matched in age, gender and education to patient participants. Demographic and clinical characteristics of all participants are summarized in Table 1. Procedures were explained to all participants and gave written informed consent prior to participation.

Table 1. Demographic and clinical characteristics of patients and healthy controls.

	Patients (n= 15)	Controls (n=15)	t / χ^2	P
Age (years)	38.07 (S.D.=7.54)	38.60 (S.D.=8.75)	0.18	0.859
Years of Education	10.67 (S.D.=2.23)	9.67 (S.D.=2.53)	-1.15	0.260
IQ	87.53 (S.D.=11.17)	100.67 (S.D.=11.26)	3.21	0.003
Female/Male ratio	3/12	5/10	0.68	0.409
Illness onset (years)	16.13 (S.D.=8.76)			
BPRS	39.67 (S.D.=10.14)			

2.2. Measures

Emotional processing was assessed with two tests: (a) The Face Emotion Identification Test (FEIT) in which subjects view 19 digital pictures of faces and select which emotion is expressed (happy, sad, angry, afraid, surprised, disgusted or neutral). (b) The Face Emotion Discrimination test (FEDT) comprises 30 pairs of digital pictures of faces and the subject has to decide if the two faces express the same or a different emotion.

Theory of mind was assessed with the Hinting Task. Contains ten short stories about a social interaction between 2 characters, read aloud to subjects. The participant is required to make inferences about the intent behind a hint dropped by one of the characters.

Social knowledge was assessed with the Schema Component Sequencing Task-Revised (SCST-R). In this task participants have to arrange sequences of component actions corresponding to specific social situations.

Functional outcome was assessed using the Social Functioning Scale (SFS). This measure covers 7 domains of psychosocial functioning and community adjustment.

3. Results

Demographic and clinical variables are presented in Table 1. Table 2 displays descriptive statistics. To determine if there were significant differences between patients and controls *t*-tests were performed. Results show that patients performed

below healthy controls in theory of mind and social functioning, difference in social schema approach significance. No significant differences between the two groups were found in emotion identification and emotion discrimination tasks. Correlations between the four social cognition measures and social functioning in the patients group were not significant.

Table 2. Sample scores (mean and standard deviation), and group differences on social cognition tests.

	Patients (n= 15)	Controls (n=15)	*t*	*P*
Emotion identification	13.67 (S.D.=2.66)	13.33 (S.D.=2.44)	-0.36	0.723
Emotion discrimination	25.80 (S.D.=2.04)	25.33 (S.D.=3.15)	-0.48	0.634
ToM	12.87 (S.D.=4.12)	20.00 (S.D.=0.00)	6.70	0.001
Social knowledge	42.93 (S.D.=12.23)	50.80 (S.D.=13.15)	1.70	0.101
Social functioning	99.40 (S.D.=9.52)	115.71 (S.D.=4.05)	6.10	0.001

4. Conclusions

The comparison of chronically stable schizophrenic outpatients (mean duration of illness: 16.13 years) and healthy controls in the social cognition subdomains of emotion processing, ToM and social knowledge, showed differences in ToM and the difference approached significance in social knowledge. Both groups scored at the same level in the two tests that measured emotion processing. Although the sample size was small it doesn't seem that emotion processing is impaired in stable outpatients with many years since the onset of the illness. These results suggest that chronicity appear to moderate social cognition deficits in schizophrenia.

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DIFFERENCE IN THEORY OF MIND AND READING THE FACIAL EXPRESSION BETWEEN ADHD AND TYPICAL CHILDREN

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Abstract

ADHD have social interaction problems. It was unclear whether the problems resulted from their impulsivity and hyperactivity or from the lack of social skills due to their deficiency in understanding mind. This study tested whether the ADHD children were deficient in their ability to understand mind using the theory of mind (ToM) tasks and emotion reading tasks (ER).

Twenty-five ADHD children and 23 age and IQ matched typical control children participated in this study. The ability to understand mind was measured using the ToM tasks (ex. White lie, false belief) and the emotion reading tasks in which children have to read the emotion through pictures of facial expressions. In addition, The Korean version of the Junior Temperament and Character Inventory (JTCI) was administered in order to assess temperament and characteristics.

ADHD children's performances in ToM and emotion reading tasks were lower than typical children's performances. In contrast, the novelty seeking scores of JTCI were higher in ADHD children than in typical children. In addition, the novelty seeking score of JTCI correlated negatively with the ability to understand mind (that is, the sum of ToM and emotion reading scores).

These results demonstrated that ADHD children were impaired in ToM and reading the emotion through facial expression. Considering the negative correlation of understanding mind with NS, impulsivity and hyperactivity might have negative effect on understanding mind. Taken together, the results suggested that both the impulsive-hyperactive characteristics and the deficiency in understanding mind might cause the incapability of social interaction in ADHD.

Keywords: ADHD, Theory of Mind, Reading facial expression.

1. Introduction

It is generally acknowledged that attention-deficit hyperactivity disorder (ADHD) patients experience significant peer relationship problems. But it was unclear whether the problems resulted from their poor attention, impulsivity and hyperactivity (Carlson, Lahey, Frame, Walker, & Hynd, 1987; Clark, Cheyne, Cunningham, & Siegel, 1988; Kadesjö & Gillberg, 2001) or from the lack of social skills due to their deficiency in understanding mind (Charman, Carroll, & Sturge, 2001; Grenell, Glass, & Katz, 1987; Landau & Moore, 1991).

This study tested whether the ADHD children were deficient in their ability to understand mind using the theory of mind (ToM) tasks and emotion reading tasks.

2. Methods

Twenty-five ADHD children (F: M, 2: 23, Mean age 12 years) and 23 typical control children (F: M, 5: 18, Mean age 12 years) participated in this study. The ability to understand mind was measured using the ToM tasks(Ghim et al., 2007) constructed white lie, false belief, Faux pas, and irony and emotional reading tasks(Cho, Park,

Song, & Ghim, 2007) in which children have to read the emotion through pictures of facial expressions. In addition, The Korean version of the Junior Temperament and Character Inventory (JTCI; (Ha et al., 2005) was administered in order to assess temperament and characteristics by their parent. JTCI is total 108 items composed of Novelty Seeking (NS), Harm Avoidance (HA), Reward Dependence (RD), persistence (P), Self-Directedness (SD), Cooperativeness (C), Self-transcendence (ST).

Figure 1. Example of ToM task (left) and ER task (right)
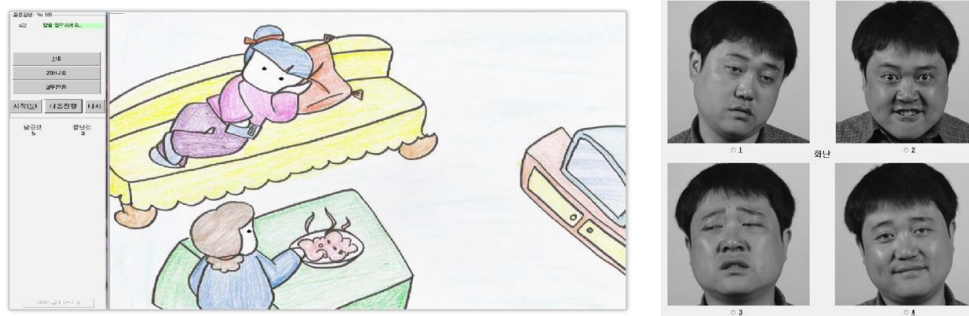
3. Results

ADHD children's performances in ToM and ER tasks were lower than typical children's performances (Table 1). In contrast, the novelty seeking scores of JTCI were higher in ADHD children than in typical children. In addition, the novelty seeking score of JTCI correlated negatively only with ToM (r =-3.74, p < .000).

Table 1. Results of ToM task, ER task and JTCI between ADHD and Control group

	ADHD mean(SD)		Control mean(SD)		t
ToM	73.29	(-12.84)	82.62	(-7.34)	t(48) = -3.053***
ER	83.04	(-8.56)	87.92	(-6.22)	t(48) = -2.23*
JTCI_NS	10.92	(-3.37)	6.17	(-3.23)	t(48) = 4.977***
HA	10.08	(-4.29)	11.87	(-4.37)	t(48) = -1.43
RD	5.92	(-2.93)	7.35	(-2.4)	t(48) = -1.837
P	1.16	(-1.34)	1.91	(-1.53)	t(48) = -1.812
SD	8.4	(-3.29)	11.65	(-4.34)	t(48) = -2.938**
C	10.88	(-2.47)	13.52	(-4.07)	t(48) = -2.745**
ST	1.28	(-1.14)	0.91	(-1.28)	t(48) = 1.053

* p < .05 , ** p < .001, *** p < 000

4. Discussion

These results demonstrated that ADHD children were impaired in ToM and reading the emotion through facial expression. Considering the negative correlation of understanding mind with novelty seeking that is behavioral activation involved the activation of behavior in response to novelty and signal of reward or relief or punishment(Kose, 2003), novelty seeking is typical trait of ADHD as impulsivity and hyperactivity might have negative effect on understanding mind. Taken together, the results suggested that both the impulsive-hyperactive characteristics and the deficiency in understanding mind might cause the incapability of social interaction in ADHD.

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IDEAL BODY IMAGE EXPOSURE'S EFFECT ON BODY DISSATISFACTION AND EATING BEHAVIOUR ON RECREATIONAL GYM USERS

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Abstract

The exposure to ideal body images may be associated with body dissatisfaction and subsequent disordered eating behaviour among women. Recent evidence highlights the association to be apparent too among men (Giles & Close, 2008). Considering the overemphasis of body image within the fitness centre environment may have a negative impact on attendees, the present study investigated the effect of ideal body exposure among recreational gym users. Twenty-four men (26.5years±17.5) and twenty-six women (27years±23), from a local gym completed a pre-exposure questionnaire comprised of demographic information, Rosenberg self-esteem scale, Eating Attitudes Test, body dissatisfaction contour rating scale and the drive for muscularity for men and the drive for thinness subscale of the EDI for women. Upon completion, participants carried out a typical gym session taking note of the ideal images on display before completing the questionnaire a second time post-exposure. It was hypothesised that high levels of body dissatisfaction and increased disordered eating behaviour would be evident post-exposure due to the increased drive for aesthetic ideals. Differences between pre- and post-exposure were assessed by using paired sample t-tests at significance level of $p \leq 0.05$. A significant increase in disordered eating behaviour was apparent post-exposure with just a slight increase in the drive for thinness and body dissatisfaction among women. However, men had a decrease in drive for muscularity and no change in body dissatisfaction post-exposure. Such findings suggest the need for a larger scale study to support the importance of displaying realistic body images within the fitness centre environment.

Keywords: Ideal body image, Fitness Centre environment, Body dissatisfaction, Eating behaviour.

1. Introduction

Although eating disorders are stereotypically associated with women wanting to lose weight, the 'ideal body' that men aspire to achieve, regularly shown in the media, is a well-toned, V-shaped, muscular upper body (Halliwell *et al.*, 2007). This current preference for a muscular, as appose to a slim physique for men has become a growing topic of interest due to the association with consequential disordered eating patterns and compulsory exercise behaviours aiming to meet these ideals (Arbour & Martin Ginis, 2006). Furthermore, body dissatisfaction and subsequent disordered eating patterns are often a result of exposure to unrealistic 'body ideals' (Hargreaves & Tiggemann, 2004). Internalisation of 'ideal body' images may have a greater impact on individuals who accept the ideal as a cultural norm (Dittmar *et al.*, 2009). This suggests that increasing an individual's desirability to achieve what is often an unrealistic representation of the ideal body increases negative feelings and low self-esteem which in turn may generate unhealthy weight management behaviours (Groesz *et al.*, 2001). The objective nature of the fitness centre environment (Prichard and Tiggemann, 2005) may have a negative influence on levels of body satisfaction of regular attendees. Despite known health benefits of taking part in physical activity, the actual extent of benefits derived could depend on the contextual environment in which it is undertaken as well as the individual themselves. McCabe *et al.* (2007) highlighted that although

many women displayed high levels of body dissatisfaction post exposure to body ideals within the fitness centre, male attendance was uncorrelated with such dissatisfaction. The aim of the current study was to identify the effect of ideal body image exposure among recreational gyms users and whether the effect varied among men and women. The hypothesis was that exposure would result in increased levels of body dissatisfaction and disordered eating patterns and decreased self-esteem as a result of the increased drive for aesthetic ideals as shown in the exposed 'ideal body' images.

2. Method

Fifty participants, 26 females and 24 males, were recruited using a purposive sampling method based on intent of the study from a local fitness private centre. The age range of participants was broad, 18 to 64 years, and with BMI scores ranging from 18.2 (underweight) to 37.2 (obese). For both samples, average gym attendance was 2 to 3 times a week and gym session duration was 30min to 1h. All 50 participants completed the pre-exposure questionnaire pack before carrying out their usual gym session. This pack included a *Demographic Questionnaire* asking for details regarding gym attendance, height, current and desired weights; the *Rosenberg Self-Esteem* (Rosenberg, 1965); the *Eating Attitudes Test* (EAT-26; Garner & Garfinkel, 1979) followed by a *Body Dissatisfaction Contour Drawing Rating Scale* (Thompson & Gray, 1995) and the *Drive for Thinness subscale* of the Eating Disorder Inventory (EDI; Garner, 1991) for female participants and a *Thin to Muscular Male Body Dissatisfaction Contour Scale* (Winitch, 1993) followed by the *Drive for Muscularity Scale* (McCreary & Sasse, 2000) for male participants. Two large frames of both female and male images were set up in prominent areas of the gym's fitness room so they were unavoidable to be seen. Participants carried out their usual gym session whilst taking note of the ideal images on display. Once participants had finished their gym session they completed the post-exposure questionnaire pack which included the same measures apart from the Demographic Questionnaire. Paired samples t-tests were employed to identify exposure effect to the images on display among both men and women samples for self-esteem, body dissatisfaction and drive for thinness/muscularity. An additional independent samples t-test assessed weight discrepancies among male and female participants. For all statistically significant analyses the p value was set at ≤ .05.

3. Results

There was a significant increase in disturbed eating behaviour post-exposure to the 'ideal' image but among women only on the total EAT-26 and subscales Dieting and Bulimia & Food Preoccupation between pre and post scores (Table 1). There were however, no statistical differences for other measures for both genders. Yet, average women scores rose after exposure for Oral Control and Drive for Thinness subscales and Body Dissatisfaction Contour though not enough to reach statistical significance.

Table 1. Comparisons of different measures between pre- and post-exposures to 'ideal body' images.

Measure	Pre-exposure		Post-exposure		Paired t-test
	Mean	SD	Mean	SD	***Significant at p ≤ .05**
EAT-26 total score					
Male	4.33	2.91	4.21	2.84	t (23) = .28, p = .779
Female	**12.35**	**11.81**	**16.31**	**14.52**	**t (25) = -2.31, p = .029***
Dieting EAT-26					
Male	2.87	2.63	2.83	2.53	t (23) = .1.06, p = .916
Female	**9.31**	**8.54**	**12.35**	**10.13**	**t (25) = -3.22, p = .003***
Bulimia & Food Preoccupation EAT-26					
Male	.37	1.01	.50	1.10	t (23) = -.77, p = .450
Female	**1.19**	**2.64**	**2.08**	**3.27**	**t (25) = -2.04, p = .052***

Despite the latter, women (M= -5.65, SD= 5.19) in contrast with men (M= -0.38, SD= 5.44) had a higher pre-exposure weight discrepancy, t(48)= 3.508, p= .01.

4. Discussion and Conclusion

The purpose of the present study was to analyse the effect of 'ideal body' image exposure on body dissatisfaction, eating disorder symptomatology and drive for aesthetic ideals on recreational gym users. Findings suggest that exposure increased disordered eating patterns among women but not among men. Also, a greater weight discrepancy was apparent pre-exposure, again from the female participants, suggesting women could be more dissatisfied with their body and sensitive to 'ideal body' image exposure than men. Although non-significant, a slight increase in drive for thinness, body dissatisfaction and decrease in self-esteem was patent among women post-exposure whereas men reported a slight decrease in EAT-26 and self-esteem but with no changes in body dissatisfaction and drive for muscularity. The lack of significant differences was possibly due to the small sample size. Other limitations included self-reported data and the short length of images' exposure. Nevertheless, the existing findings propose a larger scale study to support the importance of displaying realistic body images from both genders within the fitness centre environment. Future studies may also wish to question professional sports players as well as those exercising for recreational purposes within the fitness centre environment. From a preventative perspective, addressing issues such as the impact of 'ideal body' exposure may be useful in reducing the onset of body image disturbances in the future.

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ASSOCIATED FACTORS FOR SUICIDE ATTEMPT IN METHAMPHETAMINE USERS

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Abstract

Background: Suicide is the leading cause of death in young adults, whose ages are also at risk for substance use. Demographics, diagnoses, and environmental factors influence suicide behaviors in general population. Our aims were to identify associated factors for suicide attempt in individuals with high rate of a risk behavior, methamphetamine use, in a Thai substance treatment cohort.

Methods: Demographics and diagnoses (based on DSM-IV) were obtained from 989 methamphetamine users using the Semi-Structured Assessment for Drug Dependence and Alcoholism (SSADDA–Thai version), as part of an ongoing study of genetics of methamphetamine-induced psychosis. Self-report of lifetime suicide attempt and traumatic life event were also obtained from the SSADDA.

Results: Seventeen percents (n=168) of methamphetamine-use individuals attempted suicide at least once in lifetime. Methamphetamine users with previous suicide attempt were more likely to experience or witness traumatic life event than those without (22.6% vs 15.0%; χ^2_1=6, p=0.02). Factors associated with suicide attempt were being female (62.5% vs 44.2%; χ^2_1=19, p<0.001), methamphetamine-induced paranoia (42.9% vs 28.8%; χ^2_1=13, p<0.001), methamphetamine dependence (75.6% vs 55.9%; χ^2_1=22, p<0.001), unemployment (80.0% vs 70.8%; χ^2_1=7, p=0.007), older age χ^2_1=7, p=0.04) and higher level of education (χ^2_1=8, p=0.02).

Conclusions: Suicide attempt occurred commonly in methamphetamine users. Consistent with previous findings in general population, female methamphetamine users had a greater risk of suicide attempt than male counterpart. In addition, psychiatric diagnosis and other demographic variables were associated with suicide attempt. Experiencing traumatic life event may be a risk factor for suicide attempt in this substance treatment cohort.

Keywords: *Suicide attempt, Methamphetamine.*

1. Introduction

Demographics (i.e., sex, age), environment (i.e., traumatic life event), diagnoses (i.e., depressive or psychotic episodes) as well as substance-use influence suicide behaviors in general population (Li et al., 2012). Suicide is the leading cause of death in young adults, whose ages are also at risk for substance use (Goldman-Mellor et al., 2014). Association between substance use and suicide partly caused by the effects of substance on decision making, psychological, and physical well-being. In this study, we investigated the associated factors for suicidal attempt in methamphetamine users in a Thai substance treatment cohort.

2. Design

A retrospective, cross-sectional, descriptive study.

3. Objectives

Our aims were to identify associated factors for suicidal attempt in methamphetamine-use individuals.

4. Methods

Demographic and diagnostic variables (based on *DSM-IV*, American Psychiatric Association, 1994) were obtained from 989 methamphetamine-use individuals aged 18 years or older using the Semi-Structured Assessment for Drug Dependence and Alcoholism (SSADDA), as part of an ongoing study of the genetics of methamphetamine-induced psychosis in a Thai substance dependence treatment cohort. Participants were hospitalized as part of a four-month methamphetamine rehabilitation programme at Thanyarak Institute between 2007 and 2011. The exclusion criteria were 1) primary psychotic disorder such as schizophrenia and 2) neurological diseases such as cerebrovascular stroke, epilepsy and dementia. The study protocol was approved by the Ethical Committee, Faculty of Medicine, Chulalongkorn University (med Chula IRB). SSADDA–Thai version (Malison et al., 2011) is a comprehensive interview based on *DSM-IV* that can be used to diagnose substance dependence (i.e. methamphetamine, nicotine, alcohol, opiate, solvent, cannabis) and psychiatric disorders (i.e. major depressive episode, suicide risk, anxiety disorders, ASPD, PG). Self-report of lifetime suicide attempt and traumatic life event were available in the SSADDA and used in the study.

Associations between suicidal attempt and demographic, diagnostic, and traumatic life events were analyzed using chi-square tests.

5. Results

Of 989 methamphetamine-use individuals, 168 (17.0%) attempted suicide at least once in lifetime. Experiencing traumatic life event during lifetime was associated with suicidal attempt, specifically individuals with suicidal attempts were more likely to have traumatic life events than those without (22.6% vs 15.0%; $\chi^2_1 = 6$, p = 0.02).

Factors associated with suicide attempt were being female (62.5% vs 44.2%; $\chi^2_1 = 19$, p < 0.001), methamphetamine-induced paranoia (42.9% vs 28.7%; $\chi^2_1 = 13$, p < 0.001), methamphetamine dependence (75.6% vs 55.9%; $\chi^2_1 = 22$, p < 0.001), unemployment (80.0% vs 70.8%; $\chi^2_1 = 7$, p = 0.007), older age ($\chi^2_1 = 7$, p = 0.04) and higher level of education ($\chi^2_1 = 8$, p = 0.02). However, anxiety disorder and major depressive episode were not associated with suicidal attempt.

Table1. Factors associated with suicidal attempt in methamphetamine users.

	Suicidal attempt (n = 168)	No suicidal attempt (n = 821)	p-value
Sex			
Male	63 (37.5)	458 (55.8)	<0.001
Female	105 (62.5)	363 (44.2)	
Age			
< 21	26 (15.5)	194 (23.6)	0.04
21 - 30	87 (51.8)	414 (50.4)	
> 30	55 (32.7)	213 (25.9)	
Education			
Lower than primary level	56 (33.3)	322 (39.2)	0.02
Secondary level	98 (58.3)	467 (56.9)	
Graduate level	14 (8.3)	31 (3.8)	
Employment	32(19.0)	240(29.2)	0.007
Methamphetamine-induced paranoia	72 (42.9)	236 (28.7)	<0.001
Methamphetamine dependence	127 (75.6)	459 (55.9)	<0.001
Traumatic life event	38 (22.6)	123 (15.0)	0.02

6. Discussion

Lifetime prevalence of suicidal attempt was high in our methamphetamine cohort. There was a modest association between experiencing traumatic life event and

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suicidal attempt. A host of demographic variables including being female, having older age, higher level of education, and unemployment were associated with suicidal attempt. In addition, diagnostic factors related to substance use/dependence (e.g., methamphetamine dependence, methamphetamine-induced paranoia) were highly associated with the trait.

The high prevalence of suicidal attempt in substance sample and its association with traumatic life event are consistent with previous studies (Liu and Miller, 2014), Creamer et al). Also consistent with previous studies, female was associated with suicidal attempt than male (Liu and Miller, 2014). It might be because female methamphetamine users in our sample were more likely to experience traumatic life event than male (data not shown). Also consistent with previous finding (Wilcox et al., 2009) that reported a higher rate of suicidal attempt in older than younger age groups. Specifically, female suicidal rate increase in the age 55 and later while male had a higher suicide rate in the age of 45, however, committed suicide rate is higher by the age of 75.

Unemployment is associated with suicidal attempt, in other words, employment is a protective factor for suicidal attempt. In contrast, higher level of education is a risk factor for the trait. We speculate that persons with high socio-economic status might be more sensitive to failure/transition than those in lower status. Surprisingly, major depressive disorder was not associated with suicidal attempt, possibly due to the low prevalence of major depressive episode in our cohort. However, paranoia as an effect of using methamphetamine is associated with suicidal attempt. Previous studies show the high prevalence of suicidal attempt in psychotic individuals (Hor and Taylor, 2010) due to lack of rational decision when facing problem. Lastly methamphetamine dependence is associated with suicidal attempt highlighted the importance of reducing substance use/dependence in order to reduce suicidal rate in general population.

7. Conclusions

Suicide attempt occurred commonly in methamphetamine users. Consistent with previous findings, female methamphetamine users had a greater risk of suicide attempt than male counterpart. In addition, psychiatric diagnosis and other demographic variables were associated with suicide attempt. Experiencing traumatic life event may be a risk factor for suicide attempt in this substance treatment cohort.

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THE GLOBAL FUNCTIONING EVALUATION:
KENNEDY AXIS V COMPARED WITH WHODAS 2.0

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Abstract

Introduction. This study aims to perform a preliminary analysis of the psychometric properties of the Italian version of Kennedy Axis V, comparing it with other significant instruments for the assessment of personality structure and the evaluation of disability, such as the 12-item version of Whodas 2.0. This one has been chosen due to its comparability with the 36-item version provided for the fifth edition of DSM.

Methods. 25 patients with severe personality disorders were recruited in a therapeutic community in Northern Italy. They were administered K Axis at baseline and after three months. At baseline they were also administered IPO, SCL-90-R and SIPP-118, while Whodas 2.0 was administered only three months later.

Results. K Axis showed satisfactory results in detecting changes over time, while the low internal consistency ($\alpha = 0.614$) confirmed its multidimensionality, unlike Whodas 2.0 ($\alpha = 0.893$). Moreover, negative and significant correlations were found between the different domains of K Axis and IPO (ranged from -0.439 to -0.709), while positive and significant correlations were detected with SIPP-118 (ranged from 0.428 to 0.618). No significant correlations were found between K Axis and, separately, Whodas 2.0 and SCL-90-R.

Conclusions. K Axis, compared with Whodas 2.0, has proven to be a more useful tool for the evaluation of global functioning, being able to discriminate between the latter and the severity of symptoms. However, further investigation will be needed in order to expand the sample and to update this version of the Whodas 2.0 to the new one included in DSM-5.

Keywords: *Global Functioning, V Axis, K Axis, Whodas, DSM.*

1. Introduction

The growing prevalence of "difficult to treat" psychopathological disorders (Henggeler et al., 1997) has made it necessary to seek tools that provide specific and reproducible measures able to discriminate the assessment of the global functioning from the severity of symptoms.

The fifth edition of DSM (APA, 2013) has stimulated several toughts on the subject, prompting criticism on the introduction of Whodas 2.0 (WHO, 1988) as an alternative of the Global Assessment of Functioning (GAF) Scale (APA, 2000).

Another tool, Kennedy Axis V, was in fact already tested as a good alternative (Kennedy 2007; Bonalume et al., 2007; Mundo et al., 2010).

This study aims to compare the psychometric properties of K Axis and the 12-item version of Whodas 2.0 (Luciano et al., 2010) and to investigate the combined use of K Axis with other tools for the assessment of severity in personality organization.

We expect a lower internal consistency of K Axis, as an index of its multidmensionality and significant correlations between its scales and other measures of symptoms severity (such as the Psychological Scales of SCL-90R) and social skills (dimensions of SIPP-118 and IPO).

2. Methods

25 clinical subjects (mean age 37), were recruited in a therapeutic community of Northern Italy. They all suffered from substance abuse combined with a severe personality disorder (PD); the predominant one was the borderline PD.

They were tested in two times; at baseline and after three months. The choice of such a short follow-up period was due to the high rate of drop out of these patients.

K Axis V (Kennedy, 2007), Whodas 2.0 (WHO, 1988), Inventory of Personality Organization (Kernbertg et al., 1995), Symptomatic Checklist (Derogatis, 1977) and Severity Indices of Personality Problems (Verheul, 2008) were the administred tools.

Statistical analysis were performed using SPSS software (Barbaranelli et al., 2007). Internal consistency was investigated using Cronbach's alpha coefficient and intraclass correlation coefficient. The comparison of the scores in the two K Axis times was made through non parametric Wilcoxon test .

The validity was finally investigated through the Spearman's Rho parametric correlation coefficient.

3. Results

3.1. Internal consistency and test retest reliability
K Axis showed satisfactory results in detecting changes over time, while the low internal consistency (α=0.614, ICC=0.614) confirmed its multidimensionality, unlike Whodas 2.0 (α = 0.893, ICC=0.893).

3.2. K Axix, SCL-90R and IPO
The comparison between K Axis and SCL-90R showed low and non-significant correlations, while significant correlations were found between the global indices of K Axis and the three dimensions of IPO.

Specifically, negative and significant correlations were found between GAF-Equivalent and Identity Diffusion (ρs=-0.531, p=0.011), Primitive Defenses (ρs=-0.709, p=0.000) and Reality Testing (ρs=-0.459, p=0.032), while only Identity Diffusion negatively correlated with the Dangerousness Level in K Axis (ρs=-0.485, p=0.022).

The single scales related to Psychological Impairment (ρs= - 0.645, p=0.001), Social Skills (ρs=- 0.527, p=0.012) and Violence (ρs=-0.439, p=0.041) in K Axis negatively correlated with Primitive Defenses, while only Psychological Impairment correlated, in addition, with the remaining dimensions of IPO (Identity Diffusion: ρs=-0.539, p=0.01; Reality Testing: ρs=-0.534, p=0.01).

3.3. K Axis, Whodas 2.0 and SIPP-118
Correlations between GAF-Eq. and some scales of SIPP -118 were all positive and significant, including "Feeling recognized" (ρs=0.618, p=0.002), "Purposefulness" (ρs=0.467, p=0.029), "Endiring Relationship" (ρs=0.437, p=0.042) and "Responsible Industry" (ρs=0.428, p =0.047), as well as between GAF-Eq. and the "Relational Capacities" factor (ρs=0.423, p=0.05).

The Dangerousness Level correlated, instead, with "Emotion Regulation" (ρs=0.559, p=0.007), "Aggression Regulation" (ρs=0.612, p=0.002), "Self-reflexive Functioning" (ρs=0.460; p=0.031) and "Trustwothiness" (ρs=0.460, p=0.031), and also with "Self-Control" (ρs =0.582 , p=0.004), and "Social Concordance" (ρs=0.519, p=0.013) factors.

 In addition, there were also significant correlations between SIPP-118 dimensions and K Axis single scales: "Frustration Tolerance" was in fact associated with the Social Skills scale (ρs=0.519, p=0.013), "Emotion Regulation" with Ancillary Impairment (ρs=0.430, p=0.046), "Feeling Recognized" with Psychological Impairment (ρs=0.428, p=0.047), Social Skills (ρs=0.611, p=0.003) and Violence (ρs=0.533, p=0.011), "Purposefulness" with Social Skills (ρs=0.446, p =0.038), "Enjoyment" with Psychological Impairment (ρs=0.552, p=0.008) and Ancillary Impairment (ρs=0.465, p=0.029), "Stable Relations" with Social Skills (ρs=0.554, p=0.007).

There were also some significant and positive correlations between the macro-dimensions of SIPP-118 and K Axis scales: in particular, we highlighted significant associations between the domain of "Self-Control" and Social Skills (ρs=0.434,

p=0.044), "Social Concordance" and Substance Abuse (ρs=0.433, p=0.044), "Stable Self-Image" and Psychological Impairment (ρs=0.454, p=0.034), and, finally, between "Relational Capacities" and Social Skills (ρs =0.508, p=0.016).

4. Conclusions

The absence of significant correlations between K Axis and Whodas 2.0 has shown no similarity between the assessed constructs.

Furthermore, K Axis turned out to be able to capture aspects of symptomatology and maladaptive functioning, discriminating them from the adaptive one.

These qualities were demonstrated also by the observed correlations between K Axis and, separately, IPO and SIPP-118.

However, further investigation will be needed in order to expand the sample, update this version of Whodas 2.0 to the new one included in DSM-5 (APA, 2013) and compare different psychopathologies' scores.

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THE PSYCHOTHERAPIST/LIFE COACH: ROLE DIFFERENTIATION IN PSYCHOTHERAPISTS PRACTICING LIFE COACHING

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Abstract

Life coaching has ever more practitioners, and is a mental health related profession which has no system of centralized accreditation, licensing system or a unified definition. The limited research on coaching suggests a tentative definition as an unlicensed mental health practitioner who is not formally trained or supervised in psychotherapy. A life coach's approach is holistic, egalitarian, and directive/task-oriented in treating normal functioning clients by promoting potential strengths in pursuit of a defined goal. A vast majority of practicing life coaches do not have credentials or clinical training, whereas the few who possess credentials are often industrial/organizational psychologists wishing to practice executive coaching interstate, or through mediums not endorsed by the American Psychological Association (e.g. telephone, email and Internet chat). Many other psychotherapists simply maintain their licensure while adopting the name of "life coach" to appeal to a different clientele, specifically, the more affluent professional, or the "worried-well." This study intends to examine the dual role of trained psychotherapists who are also life coaches, and their conception of the differences and similarities in their two roles. This study will focus on self-concept, boundaries, ethics, fluidity and demarcations they perceive between their two job titles. This will be examined through an Interpretive Phenomenological Analysis, with the general aim to gain a better understanding of the rise of the professional psychotherapist/life coach.

Keywords: Coaching, Psychotherapy, Dual identity, Professional identity, Psychotherapist/life coach.

1. Introduction

Many members of Western culture have heard of life coaching and executive coaching, but people may not, however, fully understand a coach's duties as a health professional. The public is not aware of the broader spectrum uses of psychotherapy or the differences between specific titles in mental health care (Grant, 2006; Hartson, 2008). Confusion may arise when one compares their knowledge of coaching to psychotherapy. Thus, when seeking mental health services one might wonder, "What is a life coach and how are they different than a psychologist?"

In order to be a practicing life coach in the United Sates, one does not need to be a psychologist, nor have training or credentials in any form of counseling. In fact, no formal education in any subject is necessarily required to adopt the title of a life coach. As a result, individuals wishing to enter the mental health field may achieve the trusted status of a mental health professional while bypassing the years of training and education their psychologist counterparts were required to attain.

Are life coaches seizing opportunity and taking a less rigorous route to their profession (Berglas, 2002) all while snatching up the potential clients of psychologists-in-training? Or could these life coaches actually be active psychologists who are capitalizing on the concerns of clients with acute clinical disorders—deemed the "worried well"—by simply adding another skill set or title to their credentials (Turner, 2010)? Does this dual title as psychologist/life coach impact their self-concept as a

mental health professional, and are they able to maintain their roles exclusively or are they integrated?

Indeed, many psychologists can simply maintain their licensure while adopting the name of "life coach" to appeal to a different clientele, specifically, the more affluent professional, or the "worried-well." Healthcare is evolving and the rapid changes in need and placement for psychotherapy poses the opportunity for psychologists to adopt coaching techniques into their practice in order to stay relevant; further examination of this possibly evolved identity is warranted.

2. Aim of the Study

The aim of this study is to examine the self-reported experience of psychologists who use coaching interventions in addition to their traditional training. Psychologist/life coaches will be interviewed, having their responses qualitatively analyzed for common themes in their practices and professional identity.

Various aspects of the psychologist/life coach professional identity will be explored such as how the roles differ, how they may overlap, what the highpoints and challenges of each role involve, and how this dual identity influences their professional identity overall. The subjects' responses to these interview questions will be transcribed and analyzed through Interpretive Phenomenological Analysis to see if their identities as a dual practitioner are mutually exclusive or more fluid depending on the needs of the client. Boundaries and answers to ethical quandaries will be assessed through their responses as well.

3. Statement of Purpose

In this dissertation study, I propose to investigate the self-concept of psychologists who practice life coaching in addition to traditional psychotherapy and roles that differentiation and fluidity may play on a possible spectrum (Turner, 2010). In particular, I will investigate the extent to which they integrate their psychotherapeutic training into their life coaching (i.e., fluidity). Secondly, I would like to know the extent to which they may provide traditional psychotherapy while doing life coaching. I hope to reach greater understanding of their professional identity given their dual roles. Some of the questions that this dissertation will explore include: How does serving in both roles influence their professional identity and what are the differences and similarities between the two approaches?; What are the challenges and advantages of serving in both roles?; and, What are the benefits (e.g. a less rigid adherence to theory and the potential to charge higher fees per session) of providing coaching and absorbing the role of coaching on a continuum for their own practice?

The narrative data collected in these interviews will be analyzed using interpretive phenomenological analysis (IPA) (Smith & Osborn, 2003). Participants for the study will be recruited through local snowball sampling. The decision to use an IPA for this study comes from this method analyzing how individuals make sense of their personal, social, and professional world (Smith & Osborn, 2003). An IPA will explore the self-concept of people in the shared experience of practicing between two professional identities. An idiographic model of sampling and analysis of semi-structured interview responses will lay a foundation for other researchers to expand upon these findings to form generalizations on the self-concept and practice of psychologist/life coaches in subsequent research.

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OPEN THERAPEUTIC WARD FOR YOUNG PATIENTS WITH PSYCHOTIC DISORDERS – DESCRIPTION AND PATIENTS' EVALUATION OF THERAPEUTIC PROGRAM

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Abstract

The open therapeutic ward for young patients (from 18 up to 35 years old) of the 3rd Psychiatric Department of the Institute of Psychiatry and Neurology in Warsaw, Poland, is a model ward for rehabilitation and relapse prevention for patients with various psychotic disorders – particularly schizophrenia, schizo-affective disorder and acute delusional disorders. Besides the pharmacotherapy, the main therapeutic program includes diversified forms of psychotherapy. The description of the therapeutic activities in the ward is presented. They can be divided into following categories: i) psychotherapy: individual and group therapy; ii) trainings: psychoeducation, metacognitive training, relaxation training, social skills training and cognitive functions training for some of patients; iii) art and dance therapies: art-therapy, psychodrawing and dance-movement therapy iv) work with patients' families, including multifamily psychoeducation groups and family counseling in systemic paradigm or psychoeducation approach. We also present patients' (n=40) evaluation of the therapy program – with exclusion of therapeutic activities concerning patients' families. The evaluation is based on two axes: 1) noticeable efficacy and real-life usefulness of therapies and 2) attendance understood as a motivational factor to participate in therapies. The presented therapeutic program of open therapeutic ward and its profile – homogeneous group of young psychotic patients - is considered to be unique in the country and one of only few in Europe. It allows for broad research aimed at the efficacy, including its attractiveness to the patients.

Keywords: rehabilitation, psychiatric ward, schizophrenia, psychotherapy

1. Introduction

The open therapeutic ward for young patients (from 18 up to 35 years old) of the 3rd Psychiatric Department of the Institute of Psychiatry and Neurology in Warsaw, Poland, is a model ward for rehabilitation and relapse prevention for patients with various psychotic disorders. It is dedicated particularly for patients with first episode of schizophrenia, schizo-affective disorder and acute delusional disorders. The ward offers also psychiatric and psychological diagnostic procedures, specifically important in cases of first psychotic breakdown or mixed diagnosis. Complementary to the pharmacotherapy, the main therapeutic program includes diversified forms of psychotherapy. The aim of this paper is to describe ward therapeutic program and presents preliminary results of patients' evaluation of therapeutic program by survey, which is one of recently in-ward designed tools to obtain feedback.

2. Description of ward's therapeutic program

Ward therapeutic activities do not limit only to psychotherapeutic ones. Though most of the time is devoted to various psychotherapies, also important factors in treatment process are patients-designed activities like weekly tea-party or field trips. Tea-party is an hour devoted to one of the patients interest – patient can make a

speech about his/hers hobby and other patients engage in a discussion about different hobbies and ways of spending their leisure time. Field trip destinations are put to a weekly vote during one of the community meetings. It is usually a trip to a museum or an exhibition. Non-psychotherapeutic activities are considered to be crucial parts of ward therapeutic program due to socializing and empowering role of spontaneous activities. Psychotherapies were divided arbitrarily into four groups: i) psychotherapy: individual and group therapies, integrating group; ii) trainings: psychoeducation, metacognitive training, relaxation training, social skills training and cognitive functions training for some of the patients; iii) art and dance therapies: art-therapy, psychodrawing and dance-movement therapy iv) work with patients' families: including multifamily psychoeducation groups and family counseling in systemic paradigm or psychoeducation approach. To learn about ward routine see table below:

Table 1: Open therapeutic ward for young patients with psychotic disorders routine

Monday	Tuesday	Wednesday	Thursday	Friday
Community gathering 9:00				
Warm-up - physical exercises		Warm-up - physical exercises	Psychoeducation 9:30-10:30	Metacognitive training 10:00-11:00
Social skills training 12:00-13:00	Dance-movement therapy or art therapy 10:45-11:45	Dance-movement therapy - Circle dance or psychodrawing 10:15-11:15	Field trip 10:30	Therapeutic groups 11:20-12:20
Social skills training in two groups 12:00-13:00	Psychoeducation 12:00-13:00	Group therapy Or relaxation training 11:30-13:00		
Relaxation training 14:00-15:00	Dance-movement therapy or art therapy 13:30-14:30	Tea-party 14:00-15:00	Integrating group 14:00-15:00	
		Metacognitive training 15:15-16:15	Art workshops 13:30-20:00	
		Psychoeducation for patients' families 18:00		

Therapies: Every patient in the ward has individual therapeutic sessions with psychotherapist or intern (in the last case – intern works under supervision of experienced therapist) in convenient time for both participating parties. Purpose of this sessions is to support patient in process of therapy and/or help him/her in achieving short term goals. The aim of group therapy is to work on insight, current conflicts or relations and recent or pre-existing traumas. Last type of psychotherapeutic activity which do not befit exactly into profile of this category is integration group. It can be matched to this group of activities due to their aim – producing however contemporary but important relations between patients.

Trainings: differ from therapies by means that are used – more technical and practical. The key activity in this group is psychoeducation – a form of lecture about mental illnesses, their symptoms and ways to recognize and describe them (Muraszkiewicz, Jarema, 2010a). Mostly Schulz's autogenic training and visualizations, relaxation techniques are meant to reduce levels of stress and teach patients how to relieve themselves from stress in everyday life (Siek, 1998). Another training: Metacognitive training is a method to deal with cognitive biases of patients with schizophrenic psychoses (Moritz, Woodward et al., 2007).

Art and dance-movement therapies: Psychodrawing is a multipurpose activity in dependence of aims chosen by therapist. Various of themes that may be used increase likelihood of discussing different subjects: emotions, relations, ones advantages and disadvantages, goals and many others (Buchalter, 2009). There is also a chance of seeing oneself in group reflections while everyone has an opportunity to express oneself emotions or thoughts concerning someones drawing. Circle dancing – a specific form of dance-movement therapy (DMT) not only is invigorating way of coping

with depression symptoms (Koch, Morlinghaus, & Fuchs, 2007) but also can be seen as a way to build relations.

Work with patients' families: Another key elements of ward therapeutic program are multifamily psychoeducation groups and family counseling. This type of activities allow patients' families to understand what their schizophrenia affected family members are coping with or what is causing their current behavior. The broadly used example of misunderstanding among family with schizophrenia affected member: seeing negative symptoms as laziness (Muraszkiewicz, Jarema, 2010b).

3. Patients' evaluation

Every patient by the moment of discharge gives oral feedback to therapeutic team – psychiatrists, psychologists, therapists and nurses about strong and weak spots of therapeutic program and therapeutic activities that are considered by patient as most helpful or useful. Up to this point there was no attempt of obtaining patients' feedback made. Here preliminary results of feedback given by survey are presented.

Participants and method: Preliminary results are presented in this section. 13 patient, four at day of discharge and nine after at least one month of participating in ward psychotherapeutic activities were asked to complete the anonymous evaluation survey which consisted of 22 questions – two for each therapeutic activity which are: psychoeducation, metacognitive training, relaxation training, social skills training, integrating group, group therapy, therapeutic groups, dance movement therapy, dance movement therapy – circle dance, art therapy, psychodrawing. Activities concerning families was not a subject of evaluation due to their specificity. Two questions concerning every activity were: 1) How often did you participate in this activity during your stay in the ward? Answers were given on a scale from 0 to 10 where 0 was "never", 5 was "half of them" and 10 was "every time"; 2) Do you find this activity useful for your therapy process in the ward or in real-life circumstances? Answers were given on a scale from 0 to 10 where 0 was "not useful", 5 was "partially useful" and 10 was "very useful".

Results: In case of second question about usefulness of therapies from analysis were excluded responds from patients who assessed their presence at less than 5 (half of attendance) to maintain assessments validity. One-way ANOVA was conducted to analyze differences between clusters of therapeutic activities. No significant results were obtained - for attendance F=1,355 and p=0,257, for usefulness F=1,756 and p=0,187. Analysis of every particular psychotherapeutic activity was impossible due to occasional division of therapeutic group into two independent ones in order to participate in different therapies.

Table 2: Preliminary results of patients' evaluation surveys.

n = 13	1) attendance		2) usefulness	
	mean score	sd	mean score	sd
Therapies	8,65	1,68	6,98	1,9
Trainings	8,73	1,2	7,98	1,44
Art & DM therapies	7,76	2,01	6,84	1,67
All	8,38	1,68	7,27	1,71

Discussion: Even though attendance to therapy activities is a condition sine-qua-non for stay in the rehabilitation ward, some of the patients prefer to omit some of the therapies; some of them even try to obtain "sick leave" from certain therapies from theirs attending psychiatrist . This reluctance can be understood as presence of some uneasy contents – like insight into psychotic symptoms. Sometimes patients' arguments concerning will of not participating in some therapeutic activities are

indicator of accepting "sick leave". Assessment not only of usefulness in process of therapy but also real-life usefulness is possible due to vast amount of activities outside the ward and passes from the hospital. Rather high results and lack of differences between certain group of therapies show that they can be perceived by patients as equally valuable.

4. Conclusions

Preliminary results indicates that patients in general are willing to participate in therapies and perceive them as rather useful in process of their therapy or/and rather useful in "real life" outside the rehabilitation ward. Still more results are necessary to assess more reliably patients' evaluation of therapeutic activities in rehabilitation ward.

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EQUINE FACILITATED THERAPY: HOW DOES IT CONTRIBUTE TO ACHIEVE EMOTIONAL AND BEHAVIOURAL WELL BEEING?

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Abstract

Purpose: Equine Facilitated Therapy (EFT) amongst Mental Health practitioners and researchers has gained an incredible amount of respect in the past decade but it is still quite recent in Portugal. This situation contributes for the lack of understanding among the Portuguese scientific community about its therapeutic benefits. The purpose of this presentation is to contribute for the development of a consensus on the various issues regarding the use of EFT in Mental Health field. *Background:* The presentation aims to identify EFT's priorities of intervention and the biological fundaments behind its success. *Key Points:* What disorders benefit the most with EFT and why; Goals and Techniques most used in EFT; Horse and Human physiological and psychological mechanisms brought into action during EFT.

Keywords: Horse, Therapy, Human, Behaviour, Emotion.

1. What is Equine Facilitated Therapy and How does it work?

A variety of terms is used to describe a clinical approach deriving from the interaction established with horses, to improve a person's emotional, behavioural and learning skills. Equine Facilitated Therapy (EFT) is a general term that includes other terms such as Equine Facilitated Psychotherapy/Learning (EFPL). These terms refer to a clinical approach in which the main goals are the improvement of focus, hability to trust in self and others, establishment and understanding of boundaries, improvement of relational skills towards the self and others and increased body awareness (Frewin, K. & Gardiner, B., 2005, EFMH, 2003 cit in, Kirby, M., 2010, Shambo, L., 2013). Practitioners working in this field explain that being in relationship with horses provides opportunity for humans to reflect and work on emotional and behavioural issues at the same time they work on their capacity for self regulation, choice and responsibility. Solution oriented activities rather than instructive or directive ones are created so that clients can experiment, problem-solve, take risks, employ creativity and find the solutions that work best for them (Frewin, K. & Gardiner, B., 2005, EFMH, 2003 cit in, Kirby, M., 2010, Shambo, L., 2013).

The majority of clients receiving EFT are either diagnosed or suffering from some kind of emotional/behavioural problem or trauma therefore many of these clients and their issues are linked to Major Depression, Anxiety Disorder and Post Traumatic Syndrome Disorder. EFT approach is very often combined with Mindfulness and Body Awareness activities as these enable the person to feel more focused and aware of its emotions therefore for more able to self regulation and choice. The practitioner must be a qualified therapist with experience in Mental Health Field and have a good understanding of the horse's body language and psychological functioning. In many cases when the practitioner lacks this dual skill he then works alongside with a horse specialist (Frewin, K. & Gardiner, B., 2005, EFMH, 2003 cit in, Kirby, M., 2010, EAGALA, 2013, Shambo, L., 2013).

2. Why Horses?

Horses are "fight or flight" animals. This means they survive upon the hability to read the environment and respond accordingly to it in a very accurate way. This is due

to the horses's neuromotor system being very fast and well developed. These characteristics make them keen at reading body language. Because of this, it is often said the horse mirrors people's emotions and behaviours, providing an unique and very accurate feedback of the person interacting with them. Because this feedback comes from an animal, clients tend to trust in it well before they trust the therapist and therefore this facilitates the building of rapport and client's engagement with the therapy (Chandler, 2005, cit in, Wesley, M., Minatreat, N., Watson, J., 2009, O'callaghan, D., Chandler, C., 2011).

Horses and Humans are both mammals which accounts for great possibility of bonding and shared emotional experiences. This is possible because mammals, even if from different species, share the same capacity for limbic resonance: *the shared empathy in which two mammals become attuned*; limbic regulation: *the capacity for mammals to read each other's emotional cues and regulate each other's physiology* and limbic revision: *the capacity mammals have to adapt to a healthier template for future relationships* (Lewis, T., Amini, F., Lannon, R., 2000). Recent research showed that horse heart rate variability influences the human's cycle and also that the horse's calmness and autonomic states have great influence in human responses. The same study indicates that if the person projects positive feelings towards the horse, that same horse detects those feelings and in turn shares them with the human. All these facts create the perfect environment for the relational process to happen and with it, the restructuring of emotional and behavioural responses we aim to achieve with our clients (Lewis, T., Amini, F., Lannon, R., 2000, Gherke, E., 2010, Santana, A., 2012, Shambo, L., 2013,).

3. Intervention Results

Although the infancy of EFT amongst the scientific community it is possible to point out the results of some pioneer studies, aiming to give the first steps towards a better understandment of this type of clinical approach. War veterans exhibiting PTSD, major depression, panic attacks and other related problems such as addiction, identity problems, sleep disorders and grief issues, went on a EFPL program and showed an increased sense of calm, well being, connectivity and acceptance towards the community, decreased feelings of fear, increased ability to adapt and develop problem solving skills and also these veteran's families showed more engagement with their therapeutic process (Lancia, J., 2008, cit in EAGALA, 2008). Another study carried out by Ewing, C. et al. (2007), aimed to find out what quantitative and qualitative results were shown amongst youths with severe emotional disorders who went on a nine week EFPL program, consisting of a two hour length session, twice a week. Despite the lack of quantitative statistical significance the qualitative results were strong and indicated positive changes in the youths after participating in the program. Similar results were shown by Schultz, P., Barlow, G. and Robbins, L. (2007) when investigating the effects of a mental health promotion intervention modality using EFT, in a group of children who had been exposed to intra familiar violence. The 18th - month intervention included sixty-three children receiving a mean number of nineteen EFT sessions and included a pre and post- treatment test. All children showed improvements in the Global Assesment of Functioning (GAF) with correlation among the GAF scores and the number of sessions received. The study also demonstrated a quick response to EFT treatment especially in the younger children. In another study, an open clinical trial aimed to test the effectiveness of EFT and in order to do so, the 31 participants completed psychological measures prior to treatment, immediately following treatments and six months after treatment. The results showed reductions in psychological distress and enhancements in psychological well being right after the treatment and in the 6 month follow up (Klontz, B., et al., 2007). Despite positive outcomes of these studies they all lack a consistent frame of work and investigation as well as a structured investigation hypothesis and methodology therefore the studies themselves alongside

with these and other authors point out the necessity for further investigation (Frewin, K., Gardiner, B., 2005, Barlow, G. and Robbins, L., 2007, Ewing, C. et al., 2007, Schultz, P., Hutchkinson, J., 2009, Kirby, M., 2010, O´Callaghan, D., Chandler, C., 2011).

4. Discussion

EFT is a recent therapeutic approach with a fast growing crowd of professionals coming from a variety of professional backgrounds and due to the existing studies lacking specific frames of work for a specific type of problem, the reviewed studies explain the need to decrease the diversity of the participants included in each investigation so that a certain frame of therapeutic intervention in regards to a specific pattern of problem can be established and reflected upon (Barlow, G. and Robbins, L., 2007, Ewing, C. et al., 2007, Nimer, J., Lundhal, B., 2007, Schultz, P., Lancia, J., 2008, cit in EAGALA, 2008, Hutchkinson, J., 2009, Kirby, M., 2010, O´Callaghan, D., Chandler, C., 2011). Nevertheless, even if results shown by investigation are still giving their first steps into the scientific community one has to address the benefits professionals and clients admit to gain from integrating EFT in their therapeutic approaches. The most positive and consistent outcomes of therapy regarding the use of EFT are the ones whose approach, activity's guidelines and intervention model are similar or directly associated with the Equine Assisted Growth and Learning Association (EAGALA) or any other problem solving, mind-body oriented approach (Frewin, K., Gardiner, B., 2005, Barlow, G. and Robbins, L., 2007, Ewing, C. et al., 2007, Schultz, P., Lancia, J., 2008, cit in EAGALA, 2008, Hutchinson, J., 2009, Kirby, M., 2010, Shambo, L., 2013).

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NARCISSISTIC BRAIN – ATTEMPT OF NEUROPSYCHOLOGICAL DESCRIPTION

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Abstract

The term of narcissism was formed in psychodynamic paradigm as one of the traits of disordered personality. Now it is emphasized that narcissistic traits having different intensity can be found in general population – from adequate self-evaluation to pathological intensity connected with corresponding personality disorder. Narcissism, as every common phenomenon, should not evade description in neurosciences paradigm. But neural correlates of many narcissistic traits are still undetermined in this paradigm.

Due to the small amount of research concerning direct correlates between narcissistic traits and their neural basis in theoretical research there were used two research papers about empathy in narcissistic personality disorder. The rest of the analysis was completed with indirect deduction based on research of concrete traits that can be connected with narcissism phenomenon, such as envy and schadenfreude, overclaiming, inflated self-esteem and disturbed emotion recognition.

The aim of presented poster is to depict and describe the known and possible connections between narcissistic traits and their functional/structural neural correlates, especially brain regions connected with social functioning, representation of "self", executive functions and emotion recognition.

Keywords: *Narcissism, Personality, Brain, Neuropsychology, Fmri.*

1. Introduction

Concept of narcissism is present in psychoanalytical, then psychological literature and clinical practice for over a hundred years. Its long lasting presence may be due to Freud's theories concerning term of narcissism, in vast number of different meanings, as one of vital points of psychoanalysis. One way of understanding narcissism in psychoanalysis was a characteristic of ones constellation of attitudes in relationships with others or personality features, traits; among others: exhibitionism, feelings of special meaning, feelings and thoughts of omnipotence, intolerance of criticism, tendency to be critical of others who are different from oneself, suspiciousness and jealousy (Raskin & Terry, 1988). Psychologists constant interest in narcissism concept resulted in adding such a diagnostic category to classifications of mental illnesses. In DSM-V narcissistic personality disorder (NPD) is described as "A pervasive pattern of grandiosity (in fantasy or behavior), need for admiration, and lack of empathy" (APA, 2013, p. 669). Recent findings emphasize that understandings of narcissism as personality disorder and narcissism as trait, which is an object of interest mainly to social-personality psychologists, can derive from each other due to consistent image of narcissism personality profile based on high correlation of diagnostic criteria with scores of narcissism-trait questionnaires (Miller & Campbell, 2010). In this context lack of neuropsychological and neurobiological findings concerning NPD or narcissistic traits is noteworthy.

2. Empathy

Emotional empathy deficits is one of highly explored narcissistic traits. In one study (Fan et al., 2011) comparison of brain functioning in empathy task was made in groups of subjects' with high (above 66th percentile) and low (below 33th percentile) score in narcissism-trait questionnaire (Narcissism Inventory). In result it transpired that, when asked to empathize with person in emotional situation from a picture, subjects in high-narcissism group had significantly decreased deactivation in right anterior insula. There was also increased activity in dorsolateral prefrontal cortex, premotor cortex and posterior cingulate cortex but the only difference in right anterior insula activation was specifically connected to empathy task. Right anterior insula is linked to representation of self. Decrease in its deactivation might indicate that subjects with high narcissism can be preoccupied with themselves even in resting state between tasks when no cognitive activity is needed. In another study (Schulze et al., 2013) structural abnormalities in gray matter of subjects with diagnosis of narcissistic personality disorder were found. Lower volume of gray matter in comparison to healthy controls was found specifically in left anterior insula, dorsolateral and medial parts of prefrontal cortex, rostral and median cingulate cortex. Significance of these findings is associated with the fact that these brain regions are part of neural circuitry of empathy representation. Hallmark trait of NPD may be related to structural and functional abnormalities in the brain.

3. Emotion recognition

Marissen, Franken and Deen (2012) researched in their study certain ability connected to empathy, namely ability to recognize facial expressions of emotions. Results of the study show subjects' with narcissistic personality disorder inaccuracy in recognizing emotional expressions linked to basic emotions, especially fear and disgust. Recognition of disgusted face is connected to activation of basal ganglia – anterior putamen and pallidum in the right hemisphere and anterior insula and inferior parts of frontal cortex (Brodmann area 47) in the left hemisphere (Sprengelmeyer et al., 1998). Exposition with image of a fearful face activated part of frontal lobe in the left hemisphere (BA 46 and 47) and the right fusiform gyrus. Brodmann area 47, the inferior part of the frontal lobe is unspecifically connected to recognition of negative emotions. Certain inaccuracy in emotion recognition in subjects with NPD diagnosis could have its reflection in disruption of functioning in these brain areas.

4. Envy

Envy is considered as important trait in narcissistic personality profile associated with feeling of grandiosity and self-esteem vulnerability alike, though it is not present in diagnostic criteria of NPD (Krizan & Johar, 2012). Envy on neural level is connected to conflict between self-concept and acting against it. Research (Takahashi et al., 2009) shows that level of envy depends on superiority of compared object and importance of comparison domain. Such situation, of high envy, resulted in increased activation of dorsal anterior cingulate cortex. This area of the brain is considered to be connected to cognitive conflicts and feeling of pain resulting from social situations. In the same paper schadenfreude, experiencing genuine pleasure from someone's misfortune was linked to ventral striatum, part of brains reward system, which indicate that pleasure felt due to schadenfreude has its chemical basis.

5. Overclaiming

Tendency to maintain, defend and increase self-esteem at all costs is one of narcissistic traits. One of the tendencies in social communication that can play

important role in one's with narcissistic personality profile self-esteem management is overclaiming. It is defined as tendency to claim more knowledge than possible (Amati et al., 2010). Overclaiming can be observed during tests that require participants to admit to knowledge about something non-existing or impossible. With repetitive transcranial magnetic stimulation (rTMS) researchers were able to induce disruption in functioning of medial prefrontal cortex which resulted in significantly lower amount of false claiming during words-recognition task where 50% of them were fabricated. Reduced response time after rTMS may suggest that levels of self-control and social monitoring were reduced, what can indicate overclaiming subject constant preoccupation with one's social image.

6. Conclusions

Narcissism is a complex concept, it consists of various traits, sometimes potentially excluding when considered as simultaneous, like vulnerable self-esteem and feeling of grandiosity. Current data about neural correlates of narcissistic traits, both functional and structural, are limited. There are only two neuroimaging studies directly addressing narcissistic traits (Fan et al., 2011; Schulze et al., 2013). This paper concentrates on neural correlates of few arbitrarily chosen narcissistic traits such as lack of empathy, inaccuracy in recognition of facial expressions of basic emotions, envy and overclaiming. Each of these traits is or can be associated with functional characteristics of the brain, in case of empathy deficits there is also structural aspect presented. Described narcissistic traits can be considered as connected to brain regions involving empathy, executive functions, representation of "self", emotion recognition and social cognition, which indicates that narcissistic personality profile can be considered as neuropsychologically complex phenomenon.

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RELIABILITY AND VALIDITY OF TWO SCALES THAT MEASURE PARANOID THOUGHTS IN GUATEMALA

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Abstract

The main purpose of this study was to obtain a reliable and valid instrument to assess paranoid thoughts in a university student population. Due to the prevailing crime rate in Guatemala, it was hypothesized that university students because of their multiple activities and young age, will be prone to encounter more dangerous situations than a similar population.

Keywords: Paranoid Thoughts, S-GPTS, FPS, Psychometrics, Guatemala.

1. Introduction

Guatemala's weak and corrupt law enforcement institutions have proved incapable of fight the powerful organized crime groups and criminal gangs that contribute to one of the highest violent crime rates in Latin America. (http://www.hrw.org/world-report-2012/guatemala). Besides, it's a country, with several peculiarities not shared by other Latin American countries, 22 languages are spoken, has a very young population 36.8% that have less than 15 years of age, has a low level of literacy (79.8%) (http://www.cia.gov/library/publications/the-world-factbook/geos/gt.html).

Due to the fact that there are a high proportion of young people in Guatemala, and usually young people are more exposed to be out and are prone to take more risk than an older population; it was assumed that university students could probably suffer more from paranoid thoughts in an attempt to seize control over their life. Therefore, there is a need to have a good instrument to assess paranoid thoughts, and try to help not only those students who had been they or their family victims of violence, but also the rest of the local population who live constantly in fear of becoming a victim.

After reviewing the literature on the subject (Cicero & Kernes, 2011; Fenigstein & Vanable, 1992; Freeman, Slater, Bebbington, Garety, Kuipers, Fowler, Met, Read, Jordan and Vinayagamoorth, 2003; Green, Freeman, Kulpers, Bebbington, Fowler, Dunn, 2007; Magaro, Abrams & Cantrell, 1981; and Mirowsky & Ross, 1983) it was found that there were many researchers that had used two major scales: The Green Paranoid Thought Scale (GPTS) and the Fenigstein Paranoid Scale (FPS).

The main objective of this study was to find a valid and reliable scale to measure paranoid thoughts in a "normal" population attending universities that could also be used in a clinical setting.

2. Method

2.1. Participants

The sample consisted of 220 university students from three private universities, located in Guatemala City. The $\bar{X}$ age was 20.84, with a range of 17 to 30 years; 57.7% were females, 42.3% males; 36.8% of the students were working while attending the university. A consent form was signed by the participants and a short questionnaire

about demographic data and fears of crime was also used. All the data was obtained using an identification number to assure confidentiality.

One of the main limitations of this study is that it is only possible to generalize the results to a population of university students. If the scales will be used to assess older people or subjects with less education, it would be advisable to interpret the results carefully.

2.2. Measures

Two scales that measured paranoid thought were used in the study: The GPTS and the FPS. The GPTS that has been already translated into Spanish by two researchers (Ibañez I. and Padilla, J.L.; personal communication, June 28, 2013), they called it S-GPTS. The standardized procedure to adapt the Spanish version of the Scale to the Guatemalan culture in terms of language was followed and there were very few changes that had to be made.

In the case of the FPS the author gave permission (Fenigstein, A. personal communication, August, 28, 2013) to translate the scale into Spanish and three other bilingual, clinical psychologists reviewed the translation, to insure that the language was well understood and that it was culturally appropriate.

The GPTS consists of two subscales, Part A: Social Reference and Part B: Persecutions. Both subscales have 16 questions. The FPS has 20 questions. Besides, demographic questionnaire and a Fear scale that intended to measure fear they experience constantly were used. Weights were assigned to the questions according to the severity of the measure taken or feared.

3. Results

Results showed that both scales have a high estimated reliability using the Cronbach-Alpha method (GPTS part A=0.881; Part B=0.934 and GPTS Total = 0.940; FPS=0.873) and both of them have a good criterion validity (Crocker & Algina, 1986). Validity was obtained correlating the total scales with the amount of fear shown by the subjects, using several questions that were weighted according to their seriousness. The correlation between FPS and Fear was r=0.269[**], p=0.000.The correlation obtained between GPTS Total and Fears was r=0.234[**] p=0.000) and also the correlations between Fear and Part A and Part B were statistically significant with r=0.205[**] and r=0.218[**] respectively. ([**] p<=0.05)

Table 1. Scales' Statistics and Differences

STATISTIC / SCALE	GUATEMALAN $\bar{X}$	ORIGINAL $\bar{X}$	DIFFERENCE $\bar{X}$	GUATEMALAN s	ORIGINAL s	DIFFERENCE s
FPS	44.6	42.7	1.9	12.9	10.2	2.7
GPTS – PART A	29.1	26.8	2.3	9.2	10.4	-1.2
GPTS – PART B	24.5	22.1	2.4	10.4	9.2	1.2
GPTS TOTAL	53.5	48.8	4.7	17.8	18.7	-0.9

As showed in table 1, the differences between the Guatemalan sample and the sample used to develop both scales are small but all of them are higher in this sample.

4. Discussion

Looking at the results obtained with both scales, it is clear that both scales could be used in Guatemala with university students, according to the validity and reliability obtained. However, the GPTS has the advantage of having two sections and it was also used originally with a sample of people with a diagnosis of paranoia, so if the scale will be used for clinical purposes, the Green Scale probably will be more

sensitive to subjects having pathological paranoid thoughts. The Guatemalan sample, as it was expected showed a small but higher level of paranoid thoughts in the two scales. However, the scores of the FPS are very similar to the results in the sample used in this study and it also a shorter and easier scale to apply. The GPTS however, showed bigger differences. Even if the differences are small, it is surprising that the scale measuring ideas of persecution was not higher, as the correlation with the index of Fear experienced by the subjects, was significantly correlated with the Total GPTS Scale and with Part A and Part B. Looking at the results obtained in Guatemala with these two scales, it can be recommended using the 75 percentile of each scale as a cutting score. For the FPS scale 54 and for the GPTS scale 61. If someone obtained a higher score than those percentiles, it would be advisable to use either projective tests or an in depth clinical interview to better diagnose the patient's condition if any. The results obtained in this study suggest that it would be beneficial for the students that psychologists in each university attempt to develop a program. In which they could discuss and reflect about their life style, and how they can effectively avoid some of the worst dangers faced by Guatemalans, especially at that age range.

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DOES BEING RELIGIOUS IMPROVE QUALITY OF LIFE INDEPENDENTLY FROM PERSONALITY? RESEARCH IN A POLISH SAMPLE

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Abstract

Many publications indicate that being religious contributes to mental health and advantages quality of life. The way one experiences their religiosity may be determined by their personality traits like agreeableness or conscientiousness. Moreover, the perceived quality of life, measured by questionnaires, may depend on one's personality traits too, e.g. on the level of neuroticism. That is why, to define the influence of religion on quality of life, it is important to consider one's personality.

The main idea of the research showed on the poster is a comparison of quality of life of religious and non-religious people having similar results in personality test. The research is conducted in a Polish sample. Religiosity is measured by the Centrality of Religiosity Scale, personality traits are distinguished by NEO-Five Factor Inventory and the quality of life is measured by the Satisfaction with Life Scale.

The outcome of the comparison may, to some extent, answer a question if being religious is a factor improving quality of life and, consequently, the level of mental health independently from one's personality traits. The results of the research are being analyzed.

Keywords: Religiosity, Quality of life, Mental health, Personality traits.

A PHENOMENOLOGICAL ANALYSIS OF THE PERCEPTIONS AND EXPERIENCES OF SIBLINGS OF CHILDREN WITH DEVELOPMENTAL DISABILITIES

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Abstract

The study focuses on families of children with developmental disabilities. *Objective*: Because the relationship between siblings who grow up in the same family can be a very important part of one person's life, this study aims exploring the perceptions and experiences of siblings of children with developmental disabilities. *Methods*: Semi-structured interviews were used to explore the perceptions and experiences of fifteen typically developing siblings who had a brother/sister diagnosed with intellectual disability or autism spectrum disorder. Interpretative phenomenological analysis (IPA) was used to analyze the interviews. *Results*: Five main themes yielded from the analysis: i) Siblings' perceptions on the impact their brothers' condition has on their lives, ii) Siblings' positive attitudes toward the experience , iii) Siblings' perceptions on the implication their brothers' condition has on their social life, iv) Siblings' perceptions on their family interactions, v) Siblings' acceptance of their brothers' condition

Keywords: *Intellectual disability, Autism spectrum disorder, Families, Siblings, Qualitative research.*

1. Introduction

Siblings affect one another in multiple ways, and the nature of their interactions affect the dynamics and functioning of the whole family as a unit system. While many studies focus on the impact that a child with developmental disabilities has on his parents' lives, few studies focus on the experiences and perceptions of typically developing siblings of children with developmental disabilities (Kaminsky and Dewey, 2001). Research suggest that chronic stress and ongoing demands related to caring giving for a sibling with disabilities and negative coping strategies can affect the psychological wellbeing of typically developing siblings (Opperman & Alant, 2003; Strohm, 2002). Mental health issues, aggressive behavior, anxiety, somatisation, depression, behavioral problems, decreased self-esteem, difficulties in developing identity during adolescence, and low social skills are some other negative effects that growing up with a sibling with developmental disabilities can have on typically developing children (Hastings, 2003; Strohm, 2002; Berk , 2001; Breslau & Prabucki, 1987; Fowle, 1968; Gold, 1993; Grossman, 1972;). On the other hand, there is research suggesting that typically developing siblings are able of generating positive experiences from growing up with a sibling with disabilities such as, increased tolerance, responsibility and sensitivity, high acceptance of individual differences and increased social skills (Strohm, 2002; McHale, Sloan & Simeonsson 1986, Wilson, Blacher, & Baker, 1986; Grossman, 1972)

2. Objectives

This study aimed exploring the perceptions and experiences of siblings of children with developmental disabilities, by answering the following questions: (1) What does it mean for a typically developing child to live with a sibling with disabilities? (2)

What are the hassles perceived by typically developing siblings while living with a sibling with developmental disabilities? (3) What are the positive experiences perceived by typically developing siblings from growing up with a sibling with developmental disabilities?

3. Design

In order to develop a broader understanding of the phenomena, qualitative research methodology was employed in the study (Rubin & Rubin, 2005)

4. Methods

Qualitative data were collected via a semi-structured interview with each participant. The interview schedule incorporated non-directive open-ended questions and it was developed based on findings of previous research conducted in the area. Interviews were recorded onto an audio tape, and then transcribed verbatim and coded by the researcher. Each interview lasted about 40-60 minutes. The interviews were analyzed using Interpretative Phenomenology Analysis Creswell et al. 2007). .

4.1 Participants

Fifteen typically developing adolescents, residing in four different cities in Albania, aged 15-18 year old were recruited in the study (all female). This was a purposive, non random sample. The selection criteria was that the participants lived with a sibling diagnosed with an intellectual disability or an autism spectrum disorder. Participation in the study was voluntary. Prior to the interviews being conducted parental approval was obtained.

5. Results

Five main themes yielded from the analysis:

i) Siblings' perceptions on the impact their brothers' condition has on their lives: Participants described the experience of growing up with a sibling with disabilities as e unique experience and a challenge in itself, All participants reported being involved, though in different levels, in their siblings' care giving like taking care of their siblings' physical or emotional needs, keeping an eye on them, or walking them to different places when needed. They reported developing an inner sense of responsibility toward their siblings with disabilities that has become a part of them now. Three of the participants explicitly reported that they believed this experience has shaped their attitudes toward responsibilities in family and outside it. Anyway, during the interview participants exhibited an ambivalent position between their desire to provide care for their siblings and the frustration from all this.

ii) Siblings' positive attitudes toward the experience: Participants reported that they found pleasure in meeting their siblings' needs and in seeing that the relationship between them was strong and significant. They recognized that this experience has helped them praise little things in life, develop a positive attitude toward problems, and has increased family cohesion and sharing responsibilities in the family. Participants also reported that growing up with a sibling with disabilities has helped them become more compassionate, altruistic, tolerant and caring toward people.

iii) Siblings' perceptions on the implication their brothers' condition has on their social life: Growing up with a sibling with developmental disabilities has affected participants' social lives in different ways and levels. Because of their siblings' disruptive behavior participants have experienced prejudice, misunderstanding or rejection from peers. Also, they experienced frustration because care giving is a time consuming experience and because of this they could not attend all the social activities they wanted to. Sometimes participants could not attend certain places where they

could not bring their siblings with them, and other times they just felt exhausted to do anything else.

iv) Siblings' perceptions on their family interactions: The perceived impact that a child with developmental disabilities has within the families, varied in different participants. Eight of the participants reported that they never talked with their parents on the disorder of their sibling, while ten of them claimed that they never talked with their parents about their feelings toward their sibling's disability. All participants percieved discrimination in their parents' attitudes and behaviors towards them and their sibling with disability. Anyway, they claimed they didn't doubt their parents' love and the jelousy they experienced from time to time faded away soon.

v) Siblings' acceptance of their brothers' condition: All participant wished their siblings were healthy, but on the other hand they acknowledged their siblings for who they were, and perceived the disability as an inseparable part of them. They clearly stated their positive acceptance of their siblings.

6. Discussion and Conclusion

The study showed that participants appreciate the positive impact that siblings had in their life and family. This finding is supported by previous research (Strohm, 2002; McHale, Sloan & Simeonsson, 1986; Wilson, Blacher, & Baker, 1986; Grossman, 1972). Also, it seems that the disabled child may have a good effect on mood and positive feelings of the adolescent and the whole family. This finding requires further study to explore the impact on cohesion and family dynamics. It seems that typically developing siblings are parentified in some cases. This may be associated with the sex, since females are usually in this role, and only females were recruited in the present study.

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VISUAL NARRATIVES OF ILLNESS
AND MEDIATION MODELS OF RELATIONSHIPS

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Abstract

We propose a "visual turn" in narrative theory that offers a new approach to qualitative research. The image drawing method (IDM) was designed to transform invisible worlds into visible ones across different social contexts. Our study, "Visual Images of My Illness," used IDM to achieve two goals. First, we examined how patients with diabetes visually represent the relationships between themselves and their illness in the past, the present, and the future. These patients need to control their lives and maintain their motivation to follow their medical treatments throughout their life-spans. Visual narratives can help us to understand their psychological experience of, and attitudes toward, their illness and their lives. Second, we proposed three types of mediation models of narrative relationships. Narrative psychology was based on the dialogical relationship between self and other. These mediation models were based on triadic relationships that incorporate a mediator between self and other. As patients and the medical professions have different views and experiences of illness, they may hold conflict perspectives. Indeed, their joint attention to mediators, such as visual narratives, can facilitate looking at things from the other person's perspective and bridging the differences in their experiences and feelings.

Keywords: Life narrative, Visual image, Relationship, Illness, Qualitative study.

"SALUTE ALLO SPECCHIO": A REFLECTION OF HEALTH

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Abstract

Introduction & Aim. "Salute allo Specchio" ("A reflection of Health") is a psychosocial program for cancer patients, whose aim is to improve well-being and quality of life. The focus of the program is the realization of group sessions during which a team of fashion and aesthetic consultants illustrates techniques and strategies to manage the effects of the disease and its treatments (hair loss, pale, waxy skin tone..). After "beauty treatment" patients are involved in groups led by the psychologists, as the program is considered a part of a wider psychological supportive care. *Method.* Salute allo Specchio project is specifically addressed to female patients with a cancer diagnosis undergoing cancer treatment (chemotherapy, radiotherapy or surgery) at San Raffaele Hospital (Milan, Italy). Up to the present, 24 patients have taken part to the program. Anxiety (STAI-Y), depression (BDI), quality of life (EORTC- QLQ-30), body image perception (BIS), and self-esteem (SE) are assessed at the beginning (baseline), at the end of each session (time 1) and after 3 months (time 2). *Expected results.* Basing on literature, we expect that beauty treatment, in combination with psychological support and routine care, will have a positive impact on body image perception, increase self-esteem and reduce anxiety and depression, thus improving patients' general well being.

Keywords: Psychoncology, Female cancer, Aesthetic,psycholosocial program, Quality of life.

1. Introduction & Aim

For the vast majority of patients, the experience of being diagnosed and subsequently treated for cancer is a moment of deep personal crisis and the cause of severe physical and psychological stress[1]. This stress is exacerbated for many patients by additional concerns over changes in body image or self-perceptions about physical appearance[2]. Aesthetic changes (e.g. loss of hair, eyelashes and eyebrows, pale skin, and any physical impairments related to surgical removal of the lesion) have a detrimental impact on perceived quality of life, self-esteem and level of emotional and social functioning[3]. In recent years, closer attention to body image and quality of life in oncological patients has led to the creation of specific psychosocial programs, in addition to traditional medical care and whose impact has been investigated by empirical studies[3,4]. "Salute allo Specchio" is a psychosocial program for cancer patients which has been developed as a result of these studies. Its aim is to improve well-being and quality of life through the creation of group sessions, during which a team of fashion and aesthetic consultants illustrate techniques and strategies to manage the effects of the disease and its treatments. After "beauty treatment", patients are formed into discussion groups, led by the team psychologists.

2. Method

2.1. Sample Selection and Recruitment

Patients with a cancer diagnosis undergoing cancer treatment (chemotherapy, radiotherapy or surgery) at San Raffaele Hospital, Milan, were invited to take part to the

program. Women eligible were over 18, Italian speaking, with at least an elementary school graduation certificate. Medical Ethical Committee's approval and informed patient's consent were obtained.

2.2. Measures

Demographic and clinical information of all participants were collected before the beginning of the program (baseline). The following instruments were administered:

- a Self-Report Questionnaire, which included socio-demographics information, date and type of diagnosis, nature of therapy, main "aesthetic" side effects;

- the State-Trait Anxiety Inventory (STAI)[5]: it consists of 40 items (rated on a 4-point scale) and measures state and trait anxiety. Total scores range from 20 to 80 for each subscale; higher scores indicates higher level of anxiety.

- the Beck Depression Inventory–Revised (BDI-II)[6]: it contains 21 questions (each answer being scored on a scale value of 0 to 3) and assesses the level of depression. Higher scores indicates greater severity.

- the Rosemberg Self-Esteem Scale (SE)[7]: it consists of 10 items (answered on a four point scale) and it's used for the self-esteem assessment. Total scores range from 10 to 40; higher scores indicate higher self-esteem[8].

- the Body Image Scale (BIS)[9]: it's a scale (10 items scored from 0 to 3) which is used to assess the body image perception in cancer patients. Total scores range from 0 to 30, with higher scores denoting a worse body image perception.

- the European Organization on Research and Treatment of Cancer QLQ-C30 (EORTC QLQ-C30)[10]: it's a 30-item questionnaire developed to assess the quality of life of cancer patients composed of five functional scales, nine symptom scales and a global health scale. All of the scales range in score from 0 to 100. A high score for a functional and for global health status scale represents a healthy level of functioning, while a high score for a symptom scale represents a high level of problems.

A second assessment will be conducted at the end of each session (time 1) and a final follow up will be realized after 3 months (time 2).

3. Available results

3.1. Sample Characteristics

Up to now 24 patients have been recruited for the program and completed the baseline assessment. The mean age of the patients is 53,63 years (sd: 10.79; range: 32-74). Time elapsed since diagnosis is on average 19,13months (sd: 32.85; range: 1-150). All patients are treated with chemotherapy; 5 of them are also treated with radiotherapy (21%). Diagnosis are distributed as follow:
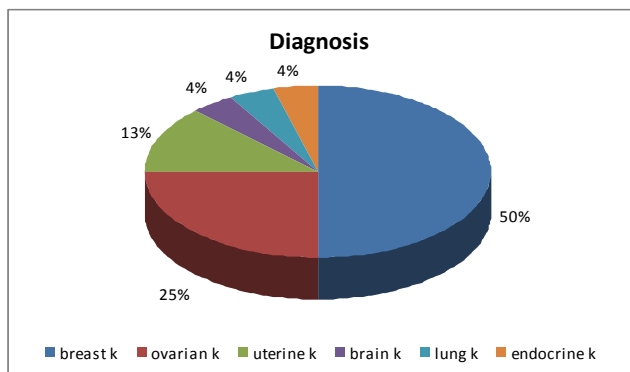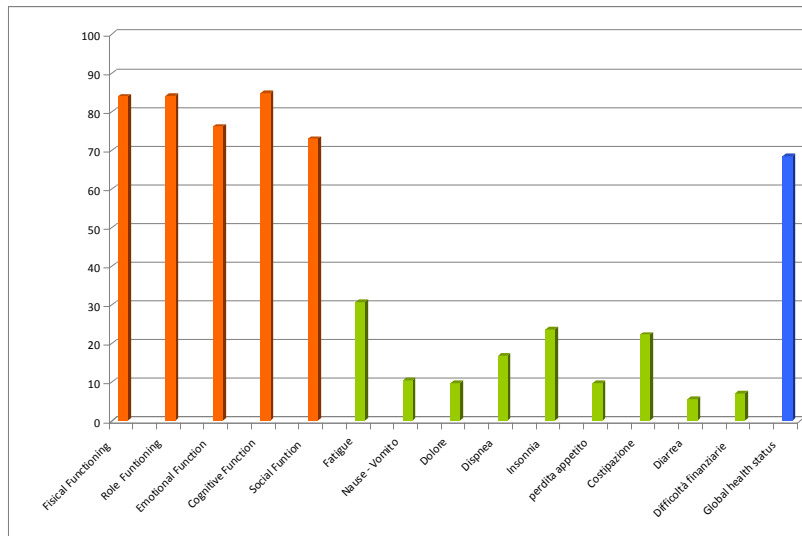

3.2. Clinical variables

Score ranges, means and standard deviation for STAI, BDI, BIS and SE are reported in the following table.

Variable	min	max	mean	standard deviation
STAI state	22	66	44.42	10.79
STAI trait	28	63	38.75	8.28
BDI total score	1	27	11.83	7.60
BIS total score	0	28	11.75	7.49
SE total score	23	40	33.13	4.52

EORTC QOL-30 results are distributed as follow:

4. Discussion and future expected results

Basing on literature, we expect that beauty treatment, in combination with psychological support and routine care, will have a positive impact on body image perception, increase self-esteem and reduce anxiety and depression, thus improving patients' general well being.

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THE EVALUATION OF A TRAINING PROGRAM TO PROVIDE FEMALE STUDENTS WITH THE SKILLS NECESSARY TO NEGOTIATE CONDOM USE

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Abstract

Introduction: Unprotected sex is currently the most common method of HIV transmission among young people in Spain. Efforts to increase condom use among this population must also consider females' perceived ability to negotiate condom use with a partner.
This study evaluated the effectiveness of a communication skills training program which aimed to increase young females' self-efficacy to; propose the use of a condom, convince their partner of the need to use one and to refuse to have unprotected sex.
Method: A pre-post design was used with a non-randomised control group. The intervention group consisted of 40 women (92.5% aged between 21 and 25), while the control group consisted of 28 women (57.1% under 21 years). Data about perceived self-efficacy to carry out the three condom negotiation behaviours were gathered using a ten point scale (1=not capable; 10=fully capable).
Findings: The results of a mixed-design ANOVA showed an interaction effect between the group and the pre-post within subjects factor ($p < 0.05$) in all three behaviours assessed. The perceived self-efficacy of participants in the intervention group to propose condom use increased significantly (mean: pre=8.63, post=9.28), compared with the control group (means: pre=8.64; post=8.79). Self-efficacy to convince their partner about the need to use a condom was also higher in the intervention group (mean: pre=8.13, post=8.88) than in the control group (mean: pre=7.93, post=8.43). Furthermore, compared with the controls (mean: pre=7.96, post=8.21), participants in the program increased their self-efficacy to refuse unprotected sex (mean: pre=8, post =8.78)
Conclusions: The training program was effective in that it increased females' perceived self-efficacy to negotiate condom use.

Keywords: *Training program, Sexual communication skills, Condom negotiation, Self-efficacy, HIV/AIDS prevention.*

1. Introduction

The practice of unprotected sex is the most common method of HIV transmission among young people in Spain, particularly among women (Ministerio de Sanidad, Política Social e Igualdad, 2012). Previous research has highlighted the relationship between condom use and the belief in one's ability to negotiate their use with a partner (Bryan, Fisher & Fisher, 2002), as well as the clinical utility of identifying and intervening in areas where young people have low perceived self-efficacy (Planes, Gómez, Gras, Font-Mayolas, Cunill & Aymerich, 2007; Wilkinson, Holahan, & Edmundson-Drane, 2002).

2. Objectives

The purpose of this study was to assess the effectiveness of a communication skills training program which aimed to increase young females' self-efficacy to:

a) propose the use of a condom,
b) convince their partner of the need to use one,
c) refuse to have unprotected sex.

3. Methods

3.1. Sample
A total of 68 female university students took part in this study. The experimental group consisted of 40 women (92.5% aged between 21 and 25 years old) who volunteered to participate in the seven sessions of the intervention program. The control group was selected to have similar characteristics to the intervention group and consisted of 28 women (57.1% under 21 years).

3.2. Design and variables
The study used a quasi-experimental pre-post design, with a non-randomised control group, and the date were gathered using a self-report questionnaire. The evaluation instrument was designed specifically to measure the program's outcomes related to changes in self-efficacy. Participants firstly read a scenario which described the need to negotiate condom use when a couple are about to have sexual intercourse for the first time. Participants were then asked to rate their perceived self-efficacy to carry out three condom negotiation behaviours using a ten point scale (1=not capable to 10=fully capable). These were; propose the use of a condom, convince their partner of the need to use one and to refuse to have unprotected sex.

Students from both the control and intervention group responded to the questionnaire at two time periods. After the first measure was taken students in the intervention group attended an eight month long communication skills training program which focused on the prevention of HIV and STD's. Following the course a post-test measure was taken for both the treatment and control groups.

3.3. Data analysis
A mixed-design ANOVA was used to compare means.

4. Results

Table 1 shows the changes in self-efficacy for both groups of participants. The mixed-design ANOVA showed an interaction effect between the group and the pre-post within subjects factor ($p<0.05$) for all three behaviours assessed.

The perceived self-efficacy of participants in the intervention group to propose condom use increased significantly ($F_{(1,66)}=5.82$), compared with the control group.

Self-efficacy to convince their partner about the need to use a condom was also higher in the intervention group ($F_{(1,66)}=4.17$) than in the control group.

Furthermore, compared with the controls, participants in the program increased their self-efficacy to refuse to engage in unprotected sex ($F_{(1,66)}=7.03$).

Table 1. Mean, standard deviation and F-values of ANOVA for self-efficacy to perform the three behaviours assessed

	Intervention Group n= 40		Control Group n= 28		
	Pre M SD	Post M SD	Pre M SD	Post M SD	*F-value*
Self-efficacy to propose	8.63 (1.78)	9.28 (1.01)	8.64 (1.85)	8.79 (1.64)	5.82 *
Self-efficacy to convince	8.13 (1.73)	8.88 (1.22)	7.93 (2.05)	8.43 (1.79)	4.17 *
Self-efficacy to refuse	8 (2)	8.78 (1.61)	7.96 (2.6)	8.21 (2.13)	7.03 *

*$p < 0,05$.

5. Discussion and conclusions

Following the communication skills training program, self-efficacy was increased to: propose the use of a condom the first time a couple have sexual intercourse, convince a partner of the need to use one, and to refuse to have unprotected sex. The intervention was effective in that it improved women perceived self-efficacy to perform these three behaviours. These results are in line with previous findings that have reported that skills–building programs for young people increase their self-efficacy and comfort levels for discussing sexual subjects with potential partners (Noboa, & Serrano-García, 2006; Pick, Givaudan, Sirkin & Ortega, 2007; Robles et al., 2006; Singh, 2003).

Consistent with other research, these findings suggest that although initially self-efficacy is related to cognitive elements, the methods used to increase this are based, in part, on the development of social skills. Self-efficacy is determined by the extent to which an individual perceives they have the skills required to successfully negotiate condom use and to respond to social pressure against their use (Noboa, & Serrano-Garcia, 2006).

Further, this research highlights the need for prevention programs, aimed at the prevention of HIV and other STD's, to put greater effort into developing the skills of assertiveness, communication and self-efficacy among women.

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THE RELATIONSHIP BETWEEN THE EXECUTIVE FUNCTIONS AND DISORDERED EATING BEHAVIOURS IN A NON-CLINICAL SAMPLE

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Abstract

Recent investigations into the neuropsychology of patients with eating disorders (EDs) suggest that there is a relationship between deficits in neuropsychological performance and eating disorder symptoms. Research that supports this relationship has mostly utilized clinical samples, limiting generalizability to non-treatment seeking individuals and non-clinical samples. In addition, little is known about the relationship between executive functioning (EF) and ED symptoms and behaviours. Given that different subtypes of EDs share similar symptoms, an understanding of this relationship is critical. Participants from a non-clinical sample will be asked to complete a battery of questionnaires to assess EF (Behaviour Rating Inventory of Executive Functioning – Adult Version; Roth, Isquith, & Gioia, 2005) and ED behaviours (Eating Disorder Inventory-3; Garner, 2004; Eating Attitudes Test; Garner, Olmsted, Bohr & Garfinkel, 1982; and the Male Body Dissatisfaction Scale; Ochner, Gray, & Brickner, 2009). Participants will also be complete three performance-based tasks from the Delis Kaplan Executive Functions System (D-KEFS; Delis, Kaplan & Kramer, 2002) to assess three executive functions: set shifting (D-KEFS Trail Making Test), planning (D-KEFS Tower Test), and inhibition/impulse control (D-KEFS Color and Word Test). The relationship between ED symptoms/behaviours and EF will be examined in undergraduate students.

Keywords: Non-clinical Eating Disorders, Executive Function.

1. Introduction

Eating disorders (ED) are a food and eating psychopathology that afflicts approximately 4% of the population (Sundgot-Borgen & Torsveit, 2004). Patients with ED are characterized by severe disturbances in eating behaviour, as well as a preoccupation with food and weight. Schmidt and Treasure's (2006) cognitive model of EDs suggest that cognitive rigidity may manifest itself in behaviours related to disordered eating, such as a rigid exercise regime. In support of this model, research has evaluated the neuropsychological functioning of patients with Anorexia Nervosa and Bulimia Nervosa (e.g., Danner et al., 2012) and results suggest that patients with an ED also demonstrate difficulties in certain domains of executive functioning (EF; Southgate, Tchanturia, & Treasure, 2009). Patients with ED often have difficulties in three specific EFs. Set shifting (the ability to shift ones mental set in order to meet the demands of a situation) is manifested behaviourally as cognitive inflexibility (Siep, Jansen, Havermans, & Roefs, 2011). There is evidence that both patients with Anorexia and Bulimia show deficits in set shifting (e.g., Tchanturia et al., 2012). Planning involves goal-directed behaviours in anticipation of future events and Alvarado-Sánchez, Silva-Gutiérrez, and Salvador-Cruz (2009) reported impaired planning in individuals at risk for an ED. The relationship between inhibition (ability to inhibit impulsive behaviour) and disordered eating is mixed.

In addition to these inconsistencies, researchers have focused almost solely on clinical samples. Although offering rich information about those who have been diagnosed with an ED, this approach can be problematic (Lilenfeld, 2011). Individuals with subclinical ED symptomology can have a low overall quality of life (Wade et al.,

2012) and research focused on a clinical sample with EDs may not generalize to this population. Thus, by focusing on a clinical, treatment-seeking sample, results may not be generalizable to people who demonstrate ED pathology but do not qualify for a diagnosis or do not seek treatment.

1.1. Objectives

The primary objective of this study is to examine the relationship between executive functioning and disordered eating in a non-clinical population. This objective of this study will be met in three ways: (1) The relationship between ED symptoms/behaviours and executive functioning for female participants will be examined. (2) Performance ratings of executive functioning will be examined to determine specific group differences for females with different levels of ED risk. Further, one of our goals is to determine if specific deficits in EF are predictive of ED risk.

Thus, it is hypothesized that:

1. ED symptoms and behaviours will be related to specific deficits in EF. Specifically, it is predicted that difficulties with set shifting will be related to higher levels of oral control, drive for thinness, and dieting tendency in females. Secondly, it is predicted that difficulties with impulse control and inhibition will be related to bulimic pathology (i.e., binge eating and purging) in females.

2. Women who are symptomatic of an ED will perform more poorly on EF tests than women who are not symptomatic of an ED.

3. Overall deficits in EF will predict overall ED risk in women.

2. Methods

Participants will be recruited from undergraduate courses at a small-sized Canadian University. Informed consent will be obtained. Measurements of participants' actual weight and height will be taken, and participants will be asked to complete a demographics questionnaire. Participants will be asked to complete study measures in one of two orders to correct for any potential order effect of test administration. For all performance-based tests, the principal investigator will closely follow the standardized procedure outlined in the D-KEFS examiners manual.

2.1 Measures

ED risk will be evaluated using self-report questionnaires including the Eating Disorder Inventory (EDI-3; Garner, 2004), the Eating Attitudes Test (EAT-26; Garner et al., 1982), and the Male Body Dissatisfaction Scale (MBDS; administered to males only; Ochner et al., 2009). Self-reported EF will be measured using the Behaviour Rating Inventory of Executive Function (Adult Version). Three tasks from the Delis-Kaplan Executive Function System will be used as performance measurements of three executive functions: set shifting (Trail Making Test), inhibition (Color-Word Interference Test) and planning (Tower Test).

3. Implications

Our sample is characterized by participants who demonstrate problematic eating behaviours and attitudes but who (1) have not been clinically diagnosed with an ED (i.e. non-treatment seeking), or (2) do not meet the diagnostic criteria for an ED. Thus, we provide preliminary evidence for the relationship between EF and problematic eating attitudes and behaviours in a non-clinical population. Further, examining the relationship between EF and disordered eating behaviours, and not diagnostic category, allows the relationship between these two larger constructs (EDs and EF) to be examined at the most basic level. Future research should employ a multi-time point

design, whereby the stability of the relationship between EF and problematic eating behaviours and attitudes can be examined over time.

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SELF-REGULATION OF LEARNING IN SECONDARY SCHOOL STUDENTS WITH SPECIAL EDUCATIONAL NEEDS

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Abstract

In the study, we investigated differences between students with SEN and other students regarding various aspects of self-regulation of learning: especially motivation for learning, cognitive and metacognitive strategies. The sample consisted of 140 students, of which 20 were students with SEN. Differences between students were most often expressed in the area of lower perceptions of self-efficacy. With respect to the regulation of time and study environment, students with SEN had greater problems in following the study schedule than other students; in the area of taking responsibility for learning, students with SEN gave up faster and did not persevere in studying the more difficult subject matter. Thus, in inclusive classes containing students with SEN, the teachers should dedicate more time to teaching learning-to-learn strategies and thus increase students' feeling of control over the learning process. In addition, students should be familiarized with various cognitive and metacognitive strategies and systematically trained to reflect on and evaluate their own study process.

Keywords: Self-regulation, Learning, Students, Special educational needs.

1. Introduction

The number of students with SEN in schools has grown considerably in recent years. The most numerous group of students with SEN in vocational and technical schools in Slovenia comprises students with learning difficulties (LD). With lower cognitive abilities and/ or problems with adaptive behavior, memory, communication and other issues, these students often fail at tasks that require planning and task implementation strategies. When they are left with no response from the outside, or receive no encouragement, or when they are not up to the task, they give up on trying to solve it. Research on the study habits of students with learning difficulties (LD) in general support the metacognitive perspective and point out that these students are cognitively and/or motivationally insufficiently involved in the assignments (Torgesen, 1980). Reasons that further impede the engagement of students with LD in the educational process also include Attention Deficit Hyperactivity Disorder (ADHD). Bender (2008) points out that many students with LD show signs such as impulsiveness and attention deficit, which are both characteristic of ADHD and can result in risky behavior. Because adolescence is characterized by numerous socio-emotional challenges and changes, these students can also develop emotional malaise, including low self-concept, anxiety and a low level of the decision-making ability (Kauffman, 2001). Midgley and Urdan (1992) have noticed that, upon enrolment in secondary school, students with LD are particularly prone to experience unpleasant feelings related to learning ability, lower grades, motivation and many social concerns. This is why it is even more important for students with SEN to develop self-regulation and decision-making skills (Wehmeyer, 1999).

2. Methodology

2.1. Sample

The study is based on a sample of students from various vocational and technical secondary school programs. The sample comprised 140 students, 87%, were male, and 13% female. 20 of them were students officially diagnosed with special needs. These were students with a mild intellectual disability and borderline intellectual abilities and who have been recognized by the multidisciplinary teams as students with learning difficulties.

2.2. Instruments

Data were gathered using the Motivated Strategies for Learning Questionnaire (Pintrich, Smith, Garcia, 1991), which consists of a scale of 81 items that measure learning motivation and the use of cognitive and metacognitive strategies in learning.

2.3. Procedure

Surveying took place with the help of a teacher and a counselor, who offered students additional explanation, as well as regularly checking whether the students understood the questions.

3. Results and interpretation

Table 1. The Mann-Whitney test of differences in the *perception of self-efficacy* (In the table there are only items, where statistically significant differences between the two groups occurred)

Perceived self-efficacy items	Students	N	R	U	P
I believe I will receive an excellent grade in this class.	Other students	120	74.10	768.50	0.01
	Students with SEN	20	48.92		
If I try hard enough, then I will understand the course material.	Other students	120	72.84	919.50	0.08
	Students with SEN	20	56.48		
I'm confident I can do an excellent job on the assignments and tests in this course.	Other students	120	73.24	804.00	0.02
	Students with SEN	20	50.70		
I'm certain I can master the skills being taught in this class.	Other students	120	73.15	882.00	0.05
	Students with SEN	20	54.60		

The feeling of self-efficacy in students with SEN is significantly lower. These students display a weaker self-concept and perceive themselves as less able and successful compared to other students. In one-third of the items measuring students' self-efficacy, the differences are statistically significant or indicate a tendency towards difference; in all items, mean values are lower for students with SEN. Bender's (2008) research also shows that adolescent students with LD are more aware of differences in learning abilities compared to their peers, which is a consequence of the cumulative effect of having LD.

In terms of time and study environment regulation, a tendency towards difference appears only in the study schedule item. Students with SEN struggle more than other students to follow a schedule. The result shows that students with SEN also differ from other students in the area of metacognitive abilities, time and work planning, attention focusing, systematic ways of studying as well as monitoring their work and results, as has been pointed out also by other studies (Lerner, 1997, Torgesen, 1982).

The difference between students with SEN and other students appears also with respect to perseverance in studying difficult course material. Students with SEN give up more easily and sooner on difficult course work or study only the easy parts. Since students with lower intellectual potential have problems understanding the course material, in particular the abstract parts and more demanding concepts, solving complex problems and understanding longer instructions, this result is not surprising.

Compared to their peers, students with SEN are typically more socially dependent in the educational process and therefore rely on external encouragement and control by their teachers and other adults (Levin, 1992). A history of failure can make them start avoiding it by clinging to the familiar and avoiding risk; they even become used to failure and take it for granted. McNamara et al. (2008) and Cosden (2001) have observed that in adolescents with LD, the frustration and damaged self-respect consequent on those problems, become so evident that students gradually lose motivation for studying, skip classes and show forms of risky behavior.

4. Conclusion

The differences between students with SEN and other students are most often expressed in the area of lower perceptions of self-efficacy. Students with SEN who participated in this research express less positive belief about themselves and their abilities; they seek study support later or not at all compared to other students and give up on studying more difficult course material. In inclusive classes containing students officially recognized as having LD, the teachers should dedicate more time to teaching learning-to-learn strategies and thus increase students' feeling of control over the learning process. The student who knows how to study and knows various strategies can use these to achieve better results, which will encourage him to engage actively in the learning process and allow him to develop the notion of responsibility for his work. In order for students with LD to be more efficient and successful in the educational process, the additional support ought to be implemented on the individual basis and help students to get organized, reflect their learning and function strategically. In addition, students with SEN, in particular students with LD, require systematic and explicit teaching of specific cognitive strategies (Agran et al., 2000). Students also need to be reminded and encouraged to use these strategies flexibly and adapt them with respect to various study environments.

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PERSONALITY TRAITS AND QUALITY OF RELATIONS TO PEOPLE IN ADULT PSYCHOLOGY STUDENTS

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Abstract

The purpose of this study was to investigate the association between personality traits and such relations to people as cynicism, aggressiveness, hostility, interpersonal trust, acceptance and agreeableness in psychology students. We also inquired about the impact of personality traits on these relations to others. The sample consisted of 115 students (aged between 23 and 45), which were taking a retraining course of practical psychology. The students completed the questionnaires: The 16 Personality Factor Questionnaire (R. Cattell), Cook – Medley Hostility Scale, Rosenberg's Faith in People Scale, Acceptance of Others Scale (W.F. Fey), Agreeableness Scale (scale from the Big Five), Communicative Tolerance Scale (V.Boyko). The results of multiple regression analysis showed that personality traits were predictors of these relations to others. The outcomes revealed that cynicism wasn't influenced by traits as predictors. Three factors impacted on aggressiveness: reactive, affected by emotional stability (C), dominant, forceful, assertive (E), and tough, objective, unsentimental sensitivity (I). The high level of students' hostility was predicted by low self-esteem and emotional instability (C). For interpersonal trust the main influential personality traits were the following factors: M (abstract, imaginative, idea-oriented), H (socially bold, venturesome, thick-skinned) and C (emotionally stable, adaptive, mature). Acceptance was predicted by higher self-esteem, more expressed apprehensiveness, self-doubting, worry (O), and the average level of social boldness (H). Agreeableness was connected with enthusiasm, animation and spontaneity (F). We gained more complete understanding about impact of personality traits on quality of interpersonal relations in psychology students and the specificity of links between them.

Keywords: Personality traits, Relations to people, Adult students-psychologists.

1. Introduction

The problem of interpersonal relations and factors influencing them in modern socio-cultural context becomes more and more urgent. The situation is determined by the fact that in modern psychology interpersonal relations and personality traits are understood as the necessary characteristics and the criteria of professionalism and maturity of the specialists of helping professions (social workers, psychologists, counselors, psychotherapists and others). For this reason an important task of modern professional education is to reveal those conditions, means and methods that make it possible to form and develop positive interpersonal relations in students. The ideas of psychologists about the role of professionally important qualities in the work of specialists are also of great importance for our investigation. We integrated of several ideas of the following psychological fields in our study: the ideas of Russian psychologists about the role of professionally important qualities in the work of specialists (Derkach, 2000 & et al.), the psychology of personality (Cattell & Mead, 2008, & et al.). We also based our work on the researches devoted to various communicative qualities and types of relations which determine development of the psychology students (Kenkel & Peterson, 2010; Corcoran & Tormey, 2010 & et al.).

2. Design and Objectives

The main aim of this study was to investigate the association between personality traits and such relations to people as cynicism, aggressiveness, hostility, interpersonal trust, acceptance, agreeableness and communicative tolerance in psychology students. Besides, we inquired about the impact of personality traits on these relations to others.

The sample consisted of 115 students (aged between 23 and 45: M=32.5: SD=9.4), which were taking a retraining course of practical (applied) psychology.

3. Methods

The students completed the following questionnaires: The 16 Personality Factor Questionnaire (R. Cattell), Cook – Medley Hostility Scale, Rosenberg's Faith in People Scale, Acceptance of Others Scale by W.F. Fey, Agreeableness Scale (scale from the Big Five), Communicative tolerance Scale by V. Boyko. Description analysis, multivariate dispersion analysis, Pearson's correlation analysis and multiple regression analysis were used.

4. Findings

On the basis of the conducted research a psychological portrait of an adult psychology student was made. His/her main personal traits were high self-esteem, sociability, abstract and at the same time concrete thinking, dominancy tendency, high moral norms, courage in social contacts, high self-control and suspiciousness.

Adult psychology students were characterized by openness, sociability and activity in establishing both interpersonal and social contacts. In behavior they show impulsiveness, social boldness, propensity to risk and readiness to be introduced into new groups and to become leaders. They had an outside orientation towards people and extraversion. Besides, the students possessed such qualities as independence of character, vigilance in relation to people, flexibility and diplomacy in dialogue. They displayed conformity reactions of submission to requirements and opinion of the group, acceptance of the standard moral rules and norms, aspiration to leadership and domination (authoritativeness). Emotional features of adult students included emotional stability, high control of emotions and behavior, stability to stress determined by discontent by themselves providing aspiration to self-actualization.

It was found that aggression, cynicism, hostility, agreeableness and acceptance of others were expressed in the students on an average level, within the limits of the norm. At the same time, adult psychology students have the lowest general communicative tolerance in comparison with tutors, nurses and doctors (Boyko, 2004). Negative rather than positive mindset was also more common for them. We explain this fact by suggestion that orientation to norms connected with dominancy motivates adult psychology students to remake, reeducate other people. Besides, according to Russian researches, many students choose the faculty of psychology in order to learn how to cope with their own intrapersonal problems.

Comparing students with different self-esteem showed that future psychologists with adequate self-esteem had such personal traits as sociability, emotional stability, high standard behavior, restraint, trustfulness, practicality, self-trust, and boldness, conformism (they followed public opinion, preferred joint activity and joint decision-making, and were guided by social approval). They were characterized by the average level of trust, goodwill and acceptance. Psychology students with inadequate self-esteem (only 8 people from 115, i.e. 6.96 %) were characterized by high level of emotional intensity, propensity for domination, emotional instability and concrete thinking. High intolerance, negative installation in dialogue, low degree of trust, goodwill and acceptance of other people was also inherent in them.

We found out a large number of significant correlations between personal features (intellectual qualities, emotional and regulatory properties) and communicative qualities. The students' orientation to standard behavior was significantly interconnected with a high level of communicative development and successful communications with other people.

The results of multiple regression analysis showed that personality traits were predictors of these relations to others.

The outcomes revealed that cynicism wasn't influenced by personal traits as predictors. Three factors had impact on aggressiveness: reactive, affected by emotional stability (C) (p = 0.000), dominant, forceful, and assertive (E) (p = 0.000), and tough, objective, unsentimental sensitivity (I) (p = 0.009). The high level of students' hostility was predicted by low self-esteem (MD) (p = 0.006) and emotional instability (C) (p = 0.011). As for interpersonal trust, its main influential personality traits were the following factors: M (abstract, imaginative, idea-oriented) (p = 0.001), H (socially bold, venturesome, thick-skinned) (p = 0.016), and C (emotionally stable, adaptive, mature) (p = 0.036). Acceptance was predicted by higher self-esteem (MD) (p = 0.000), more expressed apprehensiveness, self-doubting, worry (O) (p = 0.029), and the average level of social boldness (H) (p = 0.042). Agreeableness was connected with enthusiasm, animation and spontaneity (F) (p = 0.024). For communicative tolerance the major personality traits predicting its level were positive self-esteem (MD) (p = 0.000), warmth (A) (p = 0.002), and emotional stability (C) (p = 0.000).

5. Discussion and main conclusion

Interpersonal relations are an integral phenomenon in which changing of any characteristic consequences in changing all the other parameters and the phenomenon itself. We believe that the average psychological profile of the applied psychologists demand developmental growth of the qualities providing effective professional work and decrease of the level of intensity of those traits and relations which lower its success. It allows setting up specific targets providing the organization of retraining process of adult people for the purpose of changing their personal qualities and interpersonal relations, connected with the efficiency of professional work. To achieve these purpose students-psychologists may attend a course of individual counseling or group counseling as well as take up a specialized course in any approach of counseling.

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PSYCHOMETRIC ANALYSIS OF THE CULTURAL INTELLIGENCE SCALE (CQS) IN THE ARAB CULTURE

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Abstract

The aim of the study is to standardize Cultural Intelligence Scale (CQS) and to obtain it is validity and reliability. The scale comprised of 20 items divided into four dimensions (Metacognitive, Cognitive, Motivational, and Behavioral). The scale was translated into Arabic language. It was applied to a sample of 340 students (121 males and 219 females) using 7 points rating scale for the responses. The results show that the scale was highly valid and reliable.

Keywords: *Cultural Intelligence Scale, Cultural Intelligence, Psychometric analysis.*

SHORT FORM OF WISC-IV FOR SPANISH PRIMARY SCHOOL CHILDREN: A PILOT STUDY

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Abstract

Psychology and education professionals who work in primary schools often face the situation of having to make massive intelligence assessments of students in order to identify those who may have special educational needs. The WISC-IV takes between 60-80 minutes to be administered and it is the most used intelligence test for children in Spain. The aim of this work is to obtain a short version of WISC-IV that allows a rapid IQ estimation in about 30 minutes. In the pilot study that we have performed, the ten core subtests of the full scale were administered to 70 Spanish children of primary education (6 to 12 years old). It was decided to built a short version including 4 subtests from the full scale, one from each of the 4 domains of cognitive functioning that are evaluated by WISC-IV: perceptual reasoning, verbal comprehension, working memory, and processing speed. This led to the development of 36 different combinations of 4 subtests. The Full-Scale IQ (FSIQ) was estimated for each child from each one of the 36 short-form versions. We performed some statistical analysis in order to screen the best version: a) correlations between estimations from each version and FSIQ of the complete test, b) t tests to check the absence of significant differences between means and, c) percentage of correct classifications. The short version with better fitting to the data of the complete test was composed by the subtests: Vocabulary, Block Design, Letter-Number Sequencing, and Coding.

Keywords: Primary school, Intelligence, WISC-IV short form.

1. Introduction

The Wechsler Intelligence Scale for Children – Fourth Edition (WISC-IV) is the fourth version of the original Wechsler scale of 1949. This version appeared in English in 2003 but was not adapted to Spanish language until 2005 (Wechsler, 2005). WISC is one of the most used tests by the Spanish psychologists (Muñiz & Fernández-Hermida, 2010). Its range of application goes from 6 years 0 months to 16 years 11 months. The test provides five indices: one is about general cognitive functioning (FSIQ–Full-Scale IQ) and the other four assess specific cognitive domains: the Verbal Comprehension Index, the Perceptual Reasoning Index, the Working Memory Index and the Processing Speed Index (see Table 1). WISC-IV is made up of 10 compulsory subtests and 5 optional subtests. The total time taken to carry out the 10 core subtests is between 60 and 80 minutes for the normative sample (Wechsler, 2005).

Table 1. WISC-IV core subtests ranked according to the cognitive domain measured.

Verbal Comprehension	Perceptual Reasoning	Working Memory	Processing Speed
- Similarities	- Block Design	- Digit Span	- Coding
- Vocabulary	- Picture Concepts	- Letter-number Sequencing	- Symbol Search
- Comprehension	- Matrix Reasoning		

In educational settings sometimes there are shortages of qualified psychological examiners so a short form of the WISC-IV to screening of children with special

education needs would be very appreciated. The main objective of this study is to obtain a preliminary version of a short form of Spanish WISC-IV for screening primary school children.

There are two ways of obtaining a short form of a scale: reducing quantity of items of each subtest or reducing the quantity of subtests. We have choosen to reduce the quantity of subtests because, as indicated by López, Rodríguez, Santín, and Torrico (2003), it is easier to administer and to score; the reliability is bigger; less time of administration is needed, and it is possible to pass the complete version if wanted. According to the arguments from Blyler, Gold, Iannone, and Buchanan (2000), and Fuentes, Romero, Dasí, and Ruiz (2010), we have looked for the best four-factor solution to guarantee that the four cognitive domains were represented.

2. Method

2.1. Participants

The participants in the study were 70 primary school-aged native Spanish children from three primary schools in Valencia (26 girls and 44 boys), aged from 6 to 12 years (mean=8.8, SD=1.9). There were children from all the Primary Education levels in Spain, 28.6% of first course, 10% of second course, 8.6% of third course, 12.9% of fourth course, 35.7% of fifth course and 4.3% of sixth course. All of them had FSIQ between 129 and 70, i.e. nobody had intelligence Very Superior or Extremely Low (Wechsler, 2005).

2.2. Procedure

The ten core subtests of WISC-IV were administered as part of the usual process of intelligence evaluation carried out in schools. The children were individually assessed in a single session during school hours in a well-lit and quiet classroom. For each participant FSIQ was calculated.

In order to get the best four-factor short form, the 36 different versions combining one subtest from each cognitive domain (3x3x2x2) were prepared and an estimation of the IQ was obtained for each child from each version. The procedure to make the estimation was very similar to the regular process: raw scores of the four subtests were transformed in scale scores using the conversion tables of the manual (Wechsler, 2005), then, to make the procedure as close as possible to the complete test, we multiplied the scale scores of the subtests of Verbal Comprehension and Perceptual Reasoning by 3, and the scale scores of the subtests of Working Memory and Processing Speed by 2. The total sum was calculated and looked in a last conversion table in order to obtain the FSIQ.

3. Results and Conclusions

According to Resnick and Entin (1971) criteria', we analysed three requirements to study the quality of the 36 short forms: a) significant positive correlation between FSIQ obtained with the complete test and the reduced forms (>.90); b) no significant differences in the intelligence mean of the compared forms and, c) high percentage of success in the classification of FSIQ in Very Superior (≥ 130), Superior (120-129), High Average (110-119), Average (90-109), Low-Average (80-89), Borderline (70-79) and Extremely Low (≤ 69).

Table 2. Results of statistical analysis comparing IQ of the complet scale with IQ of the reduced scale.

Complet Scale Mean (SD)	Reduced Scale Mean (SD)	t	r	% success
93.44 (12.5)	93.04 (13.96)	0.62 (ns)	0.92 (***)	75.70

The analysis (see Table 2) indicated that the best combination of subtests was: VOCABULARY, BLOCK DESIGN, LETTER-NUMBER SEQUENCING and CODING (Figure 1).

Figure 1. Subtests of the short form of WISC-IV proposed
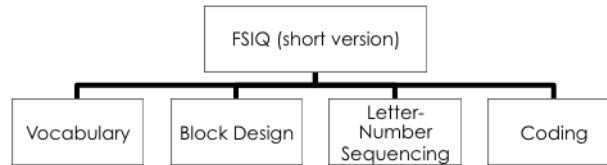
The short version that we have obtained allows an important reduction of about 60% of the time needed to obtain a valid estimation of the children intelligence. The time needed to finish the short form is about 30 minutes according the time estimations of Ryan, Glass, and Brown (2007). Children who are identified that may have special educational needs can receive the rest of the subtests of the WISC-IV for get the FSIQ. This pilot study will be completed soon when we finish a new phase of data collection we are doing now.

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COPING BEHAVIORS IN FAMILIES OF CHILDREN WITH DEVELOPMENTAL DISABILITIES IN ALBANIA

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Abstract

Positive coping behaviors may be valuable resources to deal with stress for families of children with developmental disabilities In order to empower these families and help them cope with stress, it is important for professionals to be able to identify resources available to parents. There is little research conducted on this field in Albania The study aimed providing preliminary insight to Albanian parents' tendencies in coping with stress and exploring coping behaviors that predict positive coping. Participants consist of 30 parents of children with intellectual disabilities or autism spectrum disorder. F-COPES was employed for the study. Result showed that reframing and seeking social support were most frequently utilized coping strategies. No significant relationship were found between demographic variables of participants and subscales of coping strategies.

Keywords: Intellectual disability, Autism spectrum disorder, Families, Quantitative research.

1. Introduction

Research suggests that parents of children with developmental disabilities experience higher levels of stress compared to parents of typically developed children (Simmerman, 2001; Roach et al 1999)Accumulated stress related to raising a child with disabilities and lack of appropriate resources and support for parents may lead to parental burnout and depression (Morgan, 1988). While the family system plays a substantial role in children's development (Sameroff, 1990), lack of parental psychological wellbeing may interfere and compromise children's functioning (Hastings & Brown 2002), it may interfere with the parent-child relationship quality, as well as with the outcomes that children with developmental disabilities may have from intervention programs (Robbins et al., 1991). Reducing parental stress would be of great benefit for parents and children as well (King et al., 2009).. For professionals who work with parents of children with developmental disabilities it is important to understand how they can assist parents in coping with their stressors. Coping strategies involve cognitive and behavioral instruments that people dispose or employ in order to deal with threatening circumstances in their lives and they tend to be consistent during one's life (Gray, 1994). There is little research conducted on families of children with developmental disabilities in Albania. In order to assist parents in coping with their stressors, we may start by providing some insight on the coping strategies parents actually use.

2. The present study

The aim of this descriptive study was to identify coping strategies of parents who have children with developmental disabilities. While the term developmental disabilities refers to a wide range of disabilities, in this preliminary research we chose to focus only on intellectual disability and autism. We chose to focus on these two disabilities because, though there is lack of statistical data on the number of children with developmental disabilities in Albania (UNICEF 2006), intellectual disability is considered to be a frequent diagnosis among children with developmental disabilities,

and the number of children diagnosed with autism seems to be increasing during the last years.

3. Method

3.1. Participants

A total of 30 mothers, who had at least one child diagnosed with intellectual disability or autism participated in the study. Their age range was 22-48 years old (M=31.1, SD=5.67). Most of the participants (66%) reside in the capital of Albania, Tirana, while others reside in Vlore. The parents were recruited from local organizations and special schools in Tirana and Vlore. This was a convenience sample. There were only mothers involved in the study because they were the ones who responded positively to the the researcher's request.

3.2. Instruments

Data were collected using the following instruments:

a) A structured questionnaire that aimed gathering data about parents' demographic characteristics that include age, marital status, educational level, employment of the respondent, number of children, the nature of the child's disability, number of people living in the same house (restricted or extended family), city they reside.

b) F-COPES (McCubbin, Olson, & Larsen, 1991) was used to examine coping strategies used by participants in times of stress or crises. This 5-point Likert self report scale consists of 30 items (responses ranging from "strongly disagree" to "strongly agree") that describe a variety of coping behaviors that individuals may use. There are five subscales: acquiring social support, reframing, seeking spiritual support, mobilizing family to acquire and seek help, and passive appraisal. Six scores were obtained from this instrument; an overall score on positive or negative coping strategies, and five scores on each of the subscales. The overall observed Cronbach's alpha was 0.87. The alphas for the subscales range from 0.71-0.85.

3.3. Data analysis

Data were analyzed using the Statistical Package for the Social Sciences SPSS 21.0. Descriptive statistics, (including frequencies, means, modes, standard deviations) and nonparametric tests were used for data analysis.

4. Results

The two most frequently utilized coping strategies were reframing (M = 33, SD = 4.2) and seeking social support (M = 31, SD= 7). Passive appraisal M = 8.5, SD = 2.3) was the least utilized by participants.

Looking at the frequencies and percentages for each individual item the most strongly agreed with item was Item 30: "Having faith in God or a higher power" (n = 27), followed by Item 4: "Seeking information and advice from persons in other families who have faced the same or similar problem" (n = 26) and Item 13: "Showing that we are strong" (n = 25). The most disagreed with item was Item 8 " Receiving gifts and favors from neighbors (e.g., food taking in mail, etc.) (n = 15), followed by Item 27 "Seeking advice from a minister or spiritual leader" (n = 11) and Item 23 "Participating in religious or spiritual activities (n = 11)

No significant relationship was found between demographic variables of participants and subscales of coping strategies.

To further explore the relationships between the five subscales and the overall score of positive coping measures were computed. These are presented in Table 1.

*Table 1.*Spearman's Correlations between subcales of coping strategies and overall score of positive coping

	1)	2)	3)	4)	5)	6)
1) Acquiring social support		.730[**]	.379	.552[*]	-.198	.792[**]
2) Reframing			.213	.438	-.331	.664[**]
3) Seeking spiritual support				.463[*]	.015	.729[**]
4) Mobilizing family to acquire and seek help					.223	.750[**]
5) Passive appraisal						.029
6) Overall score of positive coping						

**. p < 0.01 level.
*. p < 0.05 level.

5. Conclusions

Acquiring social support and reframing seem to be important resources for the families in order to cope with stress. These findings are supported by previous research (Churchill et al. 2010). Further research needs to be conducted on the use of passive appraisal by parents. The research findings are not consistent with other studies regarding relationships between demographic variables and subscales of coping strategies (Seligman, 1983). This study was just a preliminary one. It aimed putting some insight on parents' coping behaviors, but it holds several methodological limitations. Future research should be done on larger and more diverse samples in order to be able to make some generalizations.

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IMAGINED CONTACT: A METHOD TO IMPROVE YOUNG ADOLESCENTS' BEHAVIOURAL INTENTIONS TOWARDS A PEER PRESENTED AS HAVING ASPERGER SYNDROME

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Abstract

Children with Asperger Syndrome (AS) are at great risk of school victimization by their typically developing (TD) peers (Little, 2002). The literature indicates that negative attitudes towards other social groups often results from a lack of knowledge and contact with these groups (Crisp & Abrams, 2008). Indeed, there is a robust effect of the benefits of contact upon intergroup relations. Importantly, not only actual contact but even imagined interacting with an outgroup member (i.e., "*Imagined Contact*") can positively affect behaviours (e.g., Cameron, Rutland, Turner, Holman-Nicolas & Powell, 2011). The Imagined Contact method is applied here with the ultimate goal to improve young adolescent's behavioural intentions towards a hypothetical peer with AS and attitudes towards young people with AS in general.

Participants (N= 416, *M*age= 15.2) were male and female Greek school students. They viewed a power-point presentation about a hypothetical same-age peer with AS, while they were informed about the condition. Next, they were asked to either imagine having a pleasurable interaction with the target or just imagine his presence in the class. Participants' attitudes and behavioural intentions towards the target were assessed. Results indicated that participants who imagined interacting with the target exhibited greater behavioural intentions than participants who simple imagined his presence. However, this effect was not generalized towards young people with AS in general.

Keywords: Imagined Contact, Asperger syndrome, Peers' attitudes, Behavioural intentions.

1. Objectives

Studies have shown that children with Asperger syndrome (AS) are at high risk of peer victimization. For instance, Little (2002), based on parental reports, showed that peer victimization was 4 times more likely to occur among 411 young children with ASD than for same-age typically developing (TD) children. The literature indicates two reasons that are often responsible for negative behaviours towards outgroup members, the lack of contact with the attitude object (e.g., Gannon & McGilloway, 2009) and lack of knowledge about this outgroup (e.g., Budisch, 2004). This study aims to improves young adolescents' attitudes and behavioural intentions towards a hypothetical boy with AS. This is done by examining the effect of an indirect method of contact, named imagined contact, as well as the effect of explaining the condition to the participants.

2. Design and Methods

Participants (*N*= 416) were Greek male (*N*= 213) and female (*N*= 203) young adolescents (*M*age= 15.2, age range: 12-18 years) who viewed a power-point presentation about a hypothetical boy with AS. In this participants were either briefly explained what AS is (explanatory information condition) or just informed that the target has AS without further information (descriptive information condition). Next, participants were asked to close their eyes and imagine that the target boy is a new student and that he, either sat next to them and briefly talk about interesting things (imagined

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contact condition) or to simple imagine his presence in the class no imagine contact condition). After this, participants' behavioural intentions to perform a number of activities with the target were assessed by using the Shared Activities Questionnaire (SAQ) (Morgan, Walker, Bieberich & Bell, 1996). Attitudes, on the other hand, were assessed by the Asperger Syndrome Questionnaire (ASQ) a self-generated measurement with a 5-point semantic differential scale assessing participants' perceived similarity with the target (e.g., "*students with AS are just the same as other students in my class*") and feelings of anxiety or avoidance to interact with him (e.g., "*I feel sorry of a young person with AS*").

3. Findings

A 2 (information type: explanatory vs. descriptive) by 2 (contact type: imagined contact vs. no imagined contact) ANOVA was performed on the SAQ and on the ASQ scores. Participants in the imagined contact vs. no imagined contact condition reported greater behavioural intentions to interact with the target with AS (M= 56.9 vs. M= 54.6 respectively), F (1, 408) = 6.21, p= .01. However, no effect of the imagined contact method was found when attitudes were measured. Explanatory information about AS was found not to exert any positive effect on either participants' attitudes or behavioural intentions towards the target with AS.

4. Discussion

Regarding information it was found that a brief educational intervention about AS had no positive effects on either participants' behavioural intentions or attitudes towards the target. The literature has revealed inconsistent results about the effect of educational messages on peers' attitudes and behavioural intentions towards hypothetical targets with autism (e.g., Campbell, Ferguson, Herzinger, Jackson & Marino, 2004; Swaim & Morgan 2001).

In line with the literature, the study described here, yielded that the imagined contact method can have positive effects even when it is applied to improve behaviors towards a particularly stigmatized social group, children with AS. However, no effect was found when the method was tested on attitudes towards the target. It is important to note here that the lack of such effect might have been due to the instrument used to assess attitudes. The ASQ is a self-generated measurement and although it was developed with the help of NHS clinical psychologist and practitioners and piloted with same-age children prior to the main study its reliability and internal consistency is not known. A further explanation of the lack of an effect on attitudes might be the findings showing that attitudes are more resistant to change compared to behavioural intentions. For instance, Armitage and Conner (2001) in a meta-analysis of 185 papers showed that a large effect on intentions resulted in a small effect on attitudes. For the lack of an effect on attitudes it might also be important to consider that the study was conducted in Greece, a country with particularly limited knowledge about AS and autism (Alexiou, 2012). Thus, it is likely that participants heard about AS for the first time and thus a brief intervention might not be able to result in any attitudinal change. Nevertheless, the positive effect on behavioural intentions paves the path to further explore the method and its usability to be implemented in educational settings in order to prepare TD students to welcome peers with AS.

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BURNOUT SYNDROME AMONG BRAZILIAN LECTURERS IN UNDERGRADUATE AND POSTGRADUATE COURSES IN PSYCHOLOGY AND EDUCATION

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Abstract

This paper discusses the teacher Burnout Syndrome in higher education, based on considerations from the research conducted by the authors as part of their postdoctoral activities. It is also complemented by their experiences as lecturers in Psychology and Education degree programmes, on an undergraduate and postgraduate level. The teachers´ psychological distress is a phenomenon that affects professionals on different levels at the Brazilian education system. In the context observed by this study it manifests itself through sickness, dissatisfaction and disengagement. The reports of the respondents demonstrate the insecurity generated by the demand to take teaching practices without previous training. Many comments pay attention to the contrast between the standard training required for teachers involved in early childhood education or elementary school, and the shortage of activities provided for the training of teachers that perform at a higher education level. Several facts, presented as a phenomena related to contemporary society and the modern paradigm, tend to aggravate the syndrome and can be pinned as responsible for it: a fragmented curriculum; the progressive devaluation of the academia in the Brazilian context; the demands for an academic productivity; and an excessive workload required of many professionals. Based on these observations and the stories collected and supported by mainstream Psychoanalysis, Psychology and Education theories, this paper contributes with a framework of proposals that aim to minimize the problem investigated, suggesting ways to deal with the problem of curricular integration between disciplines and proposing an open dialogue to reflect on teaching practices and knowledge transfer.

Keywords: Teacher burnout, Higher education in Psychology and Education, Teacher education.

1. Introduction

The teachers´ psychological stress and its consequences, the teaching discomfort and the Burnout Syndrome, are phenomena that affect professionals on different levels at the educational system. This paper discusses the problem in higher education in Brazil. It is based on considerations from the research conducted by the authors as part of their postdoctoral activities and also complemented by their experiences as lecturers in Psychology and Education degree programmes, on an undergraduate and postgraduate level.

2. Observations about the Phenomenon

Throughout their post-doctoral studies on Education at the Federal University of Rio Grande do Sul[*], the authors not only engaged themselves on research related to discussions about teacher training in Brazil, but they also developed teaching activities in the post-graduate program in which they were part. As members of a team[**] in charge of teaching different versions of the same class of one subject offered to Master and PhD

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students attending the post-graduate program, the authors had, in many occasions, the chance of sharing the first teaching experience of their pupils.

Coming from different academic fields, the students repeatedly voiced their distress over the demanding responsibility of teaching without having pedagogical training in higher education teaching. This is the case, among many others, of graduate students who work as teachers in psychology undergraduate courses. Although it is expected that a psychology post-graduation course should prepare the students/teachers to deal with subjective issues of their own students, these courses, in Brazil, tend to fail when it comes to a specific mandatory pedagogical training for higher education teaching. Many comments from students/teachers point the contrast between the standard training required for teachers involved in early childhood education or elementary school, and the lack of activities provided for the training of lectures that perform at a higher education level.

On one hand, it seems that there is an implicit feeling that, by concluding a *stricto sensu* post-graduate course, the students would be more than prepared to teach higher education classes. Students who come from courses related to Education fields, on the other hand, do not show the same level of insecurity towards teaching methodology, but they feel uneasy when it comes to deal with a diverse and unprepared faculty staff. Poor infrastructure in many higher education institutions and excessive workload aggravate the feeling of dissatisfaction among young teachers.

3. Discussion

Fávero and Tauchen (2013) emphasize that, throughout the process of development of higher education institutions, teaching has acquired complex characteristics and, nowadays, it means much more than share knowledge. The demand for productivity and the involvement in coordination and commissions of bureaucratic nature require time and effort from the lecturer/researcher who has to conciliate these additional commitments with classroom and research activities. In addition, several facts presented as a phenomenon related to contemporary society and the modern paradigm tend to aggravate this situation: a fragmented curriculum; the progressive devaluation of the academia in the Brazilian context and the increasing demand for academic productivity.

The ideas discussed in this work are also complemented by other experiences the authors have undergone as lecturers in Psychology and Education degree programs, at undergraduate and postgraduate levels. In these multiples contexts, it is possible to note that the students present a certain level of uneasiness towards teaching and that this feeling may manifest itself in many different ways and degrees.

One of these forms of manifestation is the teaching discomfort. According to Esteve (1999), this phenomenon can be understood as something indefinite or hard to define with regards to the specificity of the feelings involved and their causes. The author reveals this discomfort that affects the teachers and, in many occasions, is seen as a psychosomatic disorder which leads to work absence by irrelevant motives that may be interpreted as a lack of commitment with co-workers and team.

Considering the subjectivity of the individual and its implications in the understanding of the phenomenon, Cordié (2003) emphasizes that if this uncomfortable feeling shows itself in the relationship of the professional with the institutions and the social, it is important, therefore, to consider that this conflict cannot be associated only with stress, but it should also be linked to the psychological structure of the individual and the way the person deals with adversities. In this case, the conflict may be characterized as symptom.

Another way to approach this illness phenomenon among teachers is to characterize the set of symptoms of Burnout Syndrome. For Reis et al (2013), this condition can be described as the reaction against the negative aspects of the work, generated by chronic stress and capable of affecting the mental health. Maslach and Jackson (1981) explain that the syndrome is characterized by three dimensions:

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depersonalization, dissatisfaction related to low personal accomplishment, and exhaustion.

Jesus (2007) considers that both teaching discomfort and Burnout Syndrome are results of long-term stress, manifested when the individual was unable to use his/her own emotional resources to deal with uncomfortable situations. The author has some reservations about equating stress and Burnout, whereas the first may have positive or negative consequences for the individual, the latter is always negative, affecting professionals that are over demanding to themselves and are not recognized by their work.

4. Conclusions

Regarding the context observed by the authors, it was possible to conclude that the teachers/students have this constant need for a specific teaching training and, this fact is close related to different levels of classroom stress which, in some cases, could be characterized as teaching discomfort and, in others, as Burnout Syndrome. It was also possible to perceive that these individuals chose a subject that could enable them to re-think their practice and create new ways of teaching. They raised many doubts on their classroom performance, discussed issues related to the evaluation process, the problem of curricular integration between disciplines and their discomfort towards lesson preparation.

It was also noted that by sharing these conflicts with their peers and teachers and by instrumentalizing the knowledge acquiring throughout the course, these individuals were able to face conflicts and feel much more secure and confident in their practice. The process of verbalizing their difficulties, fears, insecurities and doubts, combined with the positive feeling of being heard and understood, played a significant role for the implementations of new ways of conducting a calmer, rewarding and efficient classroom which, in turn, reduced the incidence of Burnout Syndrome.

Perhaps the stress generator aspects related to the modern paradigm will demand further reflections and changes. However, the authors were able to conclude that by promoting situations in which individuals are allowed to talk about their difficulties and, based on that, engage in the search for solutions may, as pointed by Cordié (2003), take them from the condition of victim of stress to the condition of protagonists and thinkers of their own teaching strategies and the education process. Therefore, as stated by Freud (1929/2011), if a certain amount of discomfort and uneasiness is inherent to the human condition, the opportunity to talk about their own conflicts would allow the students/teachers to take hold of key instruments in order to develop fulfilling teaching practice as a source of well being.

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SCHOOL REFUSAL AND PERCEIVED ACADEMIC SELF-EFFICACY IN A SAMPLE OF CHILEAN ADOLESCENTS

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Abstract

School refusal is an interesting topic for research because it is a problem that interferes not only in the students' academic performance, but also in their social development, whose long-term consequences can cause school dropout. The aim of our research was to test the differences between students with high and low academic self-efficacy in the dimensions of school refusal. The sample consisted of 4856 Chilean adolescents between 13 and 18 years old. We use the Escala de Evaluación de Rechazo a la Escuela Modificado (Children version; SRAS-C) which assesses four school refusal dimensions (I. Avoidance of stimuli provoking negative affectivity, II. Escape from aversive social or evaluation situations, III. Attention-seeking, and IV. Positive tangible reinforcement) and the Escala de Autoeficacia Percibida Específica de Situaciones Académica (EAPESA). The results suggest that there are significant differences in the II and IV factors scores in all samples (total, males, females and ages). Regarding the factor I, no significant differences were observed in the sample of boys between students with high and low self-efficacy. Similarly, differences in factor III scores were only significant in the total sample, in girls and in subjects between 15 and 16 years old. Overall, the results show that students with high self-efficacy have lower scores on the factors I, II and III than their peers with low self-efficacy. Conversely, students with high self-efficacy had higher scores on the factor IV than their peers with low self-efficacy.

Keywords: Academic self-efficacy, School refusal, Adolescents.

NEW PERSPECTIVES IN TRAFFIC EDUCATION
LIFE ACTION ROLE PLAYING AS A NEW METHOD OF TEACHING

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Abstract

The poster shows the current outputs of the project MELA - Method of Life Action Role Playing in traffic education. The aim of the national project is to use the method of LARP in traffic education. Traffic education is again returned to the curriculum in the Czech Republic and is conceived as a new way of teaching – the Life Action Role Playing (LARP). This method is being used with a good experience mainly in the Scandinavian countries. LARP is a type of a role play and the main principle, the active participation in the game and the experience with different situations encourage easier and long-term acquisition of the curriculum contained in the game. The method also supports personal development, improves communication and rhetorical skills. In a safe environment games leads players to take responsibility for their decisions.
9 scenarios of LARP have already been created for each year of primary school and samples of the scenarios are a part of the poster presentation. The scenarios are aimed at specific goals which are defined in the methodological materials for traffic education issued by the Ministry of Education and Ministry of Transport. Various competencies include for example rules for walking along the pavement and road, finding safe places for game, safe crossing of the road, identification of road traffic signs, travelling by public transport, etc. The evaluation of this method takes place at two primary schools and will be discussed in the poster.

Keywords: LARP (Life action role playing), Traffic education, Attitude change.

1. Introduction

Traffic education in the Czech Republic has a long standing tradition. The system of traffic education was produced for the youngest children up to high school students. At the beginning of the 21st century, a new system of education was introduced. However, traffic education disappeared completely out of education. Traffic education has become a part of the amended education system (Framework Education Plan for Basic Schools) again since the school year of 2013/2014 and students have minimum competences in the field of traffic education.

The reason for the inclusion of traffic education to the education of children and youth is the prevention of traffic injuries, road accident fatalities of vulnerable road users, in compliance with the set goals of the National Strategy of Road Traffic Safety for 2011-2020.

And how to implement traffic education that would not only be attractive for primary school students, but also bring about necessary competences to deal with the issue related to the movement in traffic environment? We opted for LARP.

2. Life Action Role Playing - LARP

LARP is a game in which the players can try what they would not able (want) to experience, e.g. road accident injury, through a special role.

LARP in education form (Hyltoft & Holm, 2009), so-called eduLARP, has clearly given story where each player plays their role. Through a "character in the game"

player experiences and at the same time learns something they do not know, on the basis of the observational learning theory (Janoušek 2000). They learn to apply the new findings on the other players.

In contrast to the countries of Northern Europe the so-called "eduLARPs" have not been integrated in the education in the Czech Republic in greater degree. An education LARP has been integrated as an educational method in a high school Østerskov Efterskole (Hyltoft & Holm, 2009).

To sum up, thanks to its construction LARP allows:

• development of abilities, particularly social and communication skills. The empathic abilities and emotional intelligence is developed.

• learning how to react to unexpected situations. In LARP, different situations are modelled when a person should have his/her own way, should react to them in a certain way.

• possible establishing of relationships in a group (in case a new team is created).

• development of creativity and imagination through the creation of the stories of characters.

Apart from the fact that LARP itself encourages to learn certain skills, the finishing phase of the game is also very important for the development of personality. The reflection and feedback by the moderator of the whole LARP plays a significant role, particularly concerning the cut off of the game. He/she allows to support the variety of views on a given issue, explain reasons of behaviour of individual characters and thus look at an issue from different viewpoints. The support of a safe game environment, it needs to be stressed out that player does not act for him/herself but for a character his/her represents, is a significant element which helps to develop key psychosocial skills, communication, and last but not least the experience with a certain issue the LARP is focused on (e.g. issues from traffic education, health education, etc.).

3. Traffic Education – LARP creation principles

The game does not contain mechanisms of conflict. The players cannot come across violence, or scenes which may be considered unsuitable concerning their age. The game is introduced through a workshop which is to provide the players with information on LARP, basic rules of the behaviour during the game and the players are taken into the game. A reflection of experiences and feedback with participants is conducted after LARP.

The length and course of the game is adapted to the needs of the users and their support (teachers).There will be a break for a snack during the game and the duration of the whole programme is approx. 5 hours.
The game is designed so that it could be prepared in different conditions. It will not be dependent on a specific environment.

3.1. Key competences of students in the field of traffic education and general key competences

• understanding of responsibility of individual road users in a traffic situation (pedestrian, cyclist, driver) and understanding of relationships between them

• identification of individual crisis situations related to cycling, driving in a car and movement of pedestrians, and design of their solutions

• ability to analyse and synthesize different information presented by a multimedia method

• ability to cooperate in a group, contribute to discussion within a group, assertively promote opinion

• ability to evaluate information critically and adjust opinion on the basis of newly acquired findings

4. Scenarios

We will demonstrate eduLARP scenarios for students of the 5th and 9th years of primary schools. These will include students at the age of 10 – 11 years and 15 -16 years.

Journey around the world (5th year of primary schools)

Students are in the roles of parents and are able to travel around the world in one day. It is a competition of two-member teams when all of them are trying to travel around the world as quickly as possible, respect the set rules in traffic and collect as many points n their passport as possible. On every continent students travel by the means of transport which bring about different rules in a given area. When respecting rules, teams collect points, which bring advantages for the movement on another continent. The principles the game is based on are the natural competitiveness, desire for adventure, and attractiveness to relate a journey with a known person.

Competition for a golden "student in the 9th year" (9th year of primary schools)

This game aims to teach primary school students to think about traffic situations as interactions of many road users, all of whom may make a mistake. The students in groups try to create a traffic situation which leads to a road accident. Through role plays, i.e. creative and active activity, they present it to other students, who try to find all possible causes of the accident. Subsequently, they search for possibilities to remove the risks they may have seen in the short scene. The game is designed as a competition between the groups of students, the most creative one wins.

5. Conclusion

The scenario evaluation at selected primary schools in the Czech Republic is currently underway.

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ACADEMIC SELF-EFFICACY INFLUENCE THE ATTITUDE AND INTEREST IN THE SCHOOL IN A SAMPLE OF CHILEAN ADOLESCENTS

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Abstract

We understand academic self-efficacy as the beliefs that students have about their own ability to accomplish the academic activities they are demanded in their school environment. Students with high sel-efficacy usually present high levels of perseverance, motivation, positive effect, academic satisfaction and academic achievement. The aim of this research is to determine in wich extent the perceived academic self-efficacy predicts high levels of attitude. The sample consisted of 625 Chilean adolescents between 23 and 17 years old. We used the Escala de Autoeficacia Percibida Específica de Situaciones Académicas and the subscale actitud of Inventario de Estrategias de Aprendizaje y Estudio - versión Escuela Secundaria. The attitude subscale assesses the students attitudes and interests towards school and academic success. Data were analyzed with binary logistic regression method. The criterion variable (attitude) was dichotomized into high (equal or higher scores than the 75th percentile) and low scores (equal or lower scores than 25th percentile). The proportion of correctly classified cases was 65.4%, and the Nagelkerke R^2 value was .14. We obtained a value of odds ratio of 1.11, wich indicates that for every point that academic self-efficacy score increases, the probability of high attitude increases 11%. The results revealed a positive and significant prediction relationship between academic self-efficacy and high attitude.

Keywords: Academic self-efficacy, Attitude, Binary logistic regression.

APPLYING THE SERIOUS EDUCATIONAL VIDEOGAME: CEREBREX TO 6TH GRADERS FOR AN EDUCATIONAL AND MOTIVATIONAL BOOST

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Abstract

Recently there has been a series of technological innovations to improve education. Educational systems have been incorporating progressively those innovations in order to enhance and make more motivating the learning experience. This paper presents the preliminary effects of CEREBREX (Lemus, Ajin & Pinto, 2014), a serious educational videogame. This video game was tested for the first time in sixth grade in a private school in Guatemala City. The children in one group were encouraged to play for ten weeks, and the control group received only their regular mathematics class. The results showed there was an increase in Mathematics highly significant, between pre and post test in the group using CEREBREX. However, in the control group there was no such increment.

Keywords: Serious Educational Games, Motivational Analysis, Blended Learning, Gamification.

1. Theoretical Background

According to (Deci & Ryan, 1985), most educational activities were not designed to be intrinsically motivating. Also, (Garcia, 2013) mentions that in Guatemala, the problem solving competence is an important requirement in national curricula that needs improvement. Contrastingly, videogames have a magnetic motivational appeal for children, where 97 percent of today's youth play (Lenhart, 2012), and have been used to positively influence both psychological and physical well-being (Przybylski, Rigby, Ryan, 2010). In order to help bridge the gap, (Lemus, Ajin, Pinto, 2014) proposed Cerebrex, a serious educational videogame that enhances learning by developing cognitive areas and concentrating on motivational aspects.

2. Objectives

The main purpose of the current study was to assess the impact of the serious educational game, called Cerebrex.

3. Methodology

3.1. Participants
Data were collected for 72 sixth graders from 11 to 12 years of age, all of them attending a private school in Guatemala City. It was a mixed group consisting of 79% male and 21% female.

3.2. Instruments
A mathematics test was applied during a pretest and a post test. The test was designed by the teacher, according to the program for that grade.

Cerebrex was used as a game to be played by the experimental group. Training on how to use the game was provided to the students before engaging in the experiment.

Figure 1. Cerebrex Main Menu

Figure 2. Mini-Game: Ecuaciones level-1

3.3. Procedures

The data was collected in a private school in Guatemala City. The pretest was applied to both groups, experimental and control group at the beginning of the school year. A training program was done with the experimental group until all the children felt comfortable with the usage of the game. The teacher taught both groups in the same way and after 10 weeks a post test was applied to the experimental and control group.

4. Results

The statistical analysis was mainly done with measures or central tendency, in Fig.3. We can see the comparison of means between: Group A (pre mean: 10.72, post mean: 22.83) and Group B (pre mean: 9.69, post mean: 12.06). It is clear that the effect Cerebrex had on the evaluation instrument was very strong since Group A's mean score increased by 12.11, while Group B only increased by 2.36. Standard deviation remained almost the same: Group A pre: 7.09, post: 7.61 and Group B: pre: 8.30, post: 8.02. Table 1. Shows us the mean values and a very strong p- value.

Figure 3. Comparison of means between Groups A & B before and after Cerebrex.
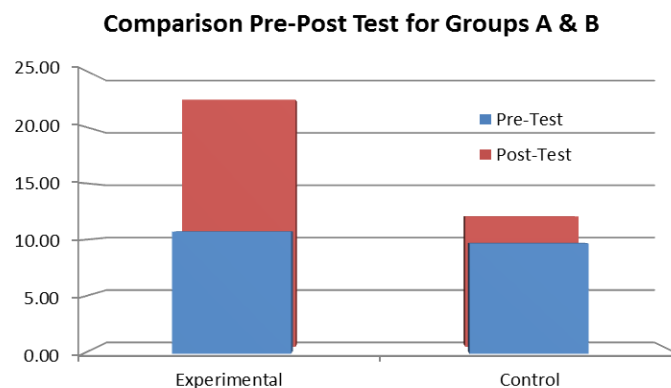

Table. 1. Sample description n=72.

Variable/Group	Mean	P
Pre-Test Experimental	10.72	0.0000
Post-Test Experimental	22.83	
Pre-Test Control	9.69	0.1808
Post-Test Control	12.05	

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5. Discussion and Recommendations

Comparing the means obtained in this study between the experimental and the control group there was a highly significant difference between them. It is not clear why they increased their Mathematics scores and that needs to be studied further. Another important issue is that subjects who did not play so much, also improved their scores in Mathematics. It can be hypothesized that there was a Hawthorne effect (Mayo, 1949) on them, that the whole class was doing better and the teacher had higher expectations (Pygmalion effect - Rosenthal & Jacobsen, 1968), or preparation for future learning (Belenky & Nokes-Malch, 2012) (Bransford & Schwartz, 1999). It could have also increased the general competitiveness making everyone try harder.

6. Conclusions

It was clear that the game had a positive effect in the learning of Mathematics in the sixth graders. More research is needed to try to understand why this is so and why even if not playing a lot the children got better grades. There is a need to set up a more controlled experiment in which the teacher does not know which is the experimental group.

Informal observations suggest there has been an increase in self-esteem and better interpersonal relationships. Further studies are advised to confirm this hypothesis.

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SCIENTIFIC LITERATURE REVIEW ABOUT SCHOOL REFUSAL THROUGH THE SSCI

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Abstract

The school refusal is a phenomenon that adversely affects educational performance, developing social skills, may even end up in dropout. The volume of scientific production published annually about a topic is one indicator of the level of interest in this field of knowledge. The aim of this study is to analyze the temporal evolution of the scientific production about school refusal from 2004 to 2012 in relation to the journals. The sample consists of 106 studies published in the *Social Science Citation Index* (SSCI), of the Web of Science, from 2004 to 2012. The results show that the number of publications increases with time ranging from 6 (2005) to 16 (2012) studies with an average of 11.8 published research. Among 77 journals identified, three stand out as more productive: *Educational Review, Cognitive and Behavioral Practice* and *Psychology in the Schools*. Notably the year of publication of the studies in these journals because 77% of the publications are dated after 2007. From the results obtained it is concluded that school refusal is a topic of current interest because scientific productivity is increasing temporarily and the specialized journals in this phenomenon concentrate their publications in recent years.

Keywords: School refusal, Review, Productivity, Year, Journal.

1. Introduction

School refusal can be defined as any refusal by a child to attend school or to have difficulty attending classes for an entire day by a child (Kearney & Silverman, 1996). According to different researchers school refusal is present in approximately 5% of school-aged children (Sewell, 2008). However, the prevalence rate varies between 1% (McShane, Walter & Rey, 2001) and 28-35% (Kearney, 2001; Pina, Zerr, Gonzales & Ortiz, 2009).

School refusal behavior can manifest it in different ways: missing long periods of school time, attending school with great dread and somatic complaints that precipate pleas for future nonattendance or behaving with temper tantrums in the mornings to avoid going to school (Kearney, 2003). This phenomenon has serious consequences in both children and young people like poor academic performance, difficulties in the development of social skills and even a progressive development of school refusal can finish in dropout. In addition, the unexcused absences from school are a key risk factor for violence, injury, substance use, psychiatric disorders, delinquency and economic deprivation (Kearney, 2008), so its study and intervention is necessary to ensure proper development of young people to adulthood.

Currently the scientific productivity about a topic must be assessed globally and its revision is the starting point for any investigation. In that sense, bibliometric studies are considered a useful method because it allows to analyze the productivity of the scientific literature and meet their development (Costas, Van Leeuwen & Bordons,

2010). The aim of the present study was to analyze the temporal evolution of the scientific production about school refusal from 2004 to 2012 in relation to the journals.

2. Design

This research is an ex post facto retrospective study by classification of Montero & León (2007). Descriptive and frequency to identify and systematize the different variables analyzes were used. The statistical program used was SPSS Statistics 20.

3. Objectives

The aim was to do an analysis bibliometric about school refusal between the years 2004-2012, with the purpose of understanding the evolution and current state of research in this area.

4. Methods

4.1. Analysis unit
This study analyzed 106 papers published in the Social Sciences Citation Index (SSCI) database during the period 2004-2012.

4.2. Instruments
The database used was the Social Sciences Citation Index (SSCI) of the Web of Knowledge.

4.3. Procedure
First, we sought to determinate the units of analysis using the search strategy "school refusal" or "school phobia" or "negative school behavior" or truancy, limited our results in the SSCI to the period from 2004 to 2012. Applying this strategy yielded a total of 298 results. After a through review of the content developed by the documents only 106 documents were finally selected to make up our sample. The next step was to examine the temporal evolution of research and the productivity by journals.

4.4. Results
Temporal productivity
During the period from 2004 to 2012 were found 106 documents dealing with school refusal. The number of publications per year ranges from 6 (5,7%) to 16 (15,1%) documents, with an average of 11,8 documents per year. The largest quantity was found for the year 2012, while the least number of publications corresponds to the years 2005.
Journals
The number of journals identified by reviewing the 106 studies was 77. More than half the journals in our sample have published only one article on this research topic, however there are three journals noted as the most productives: *Educational Review*, *Cognitive and Behavioral Practice* and *Psychology in the Schools.* Should be note than 77% of publications in these three journals are dated after 2007.

5. Discussion

The present bibliometric study provides a view of the evolution, during the years 2004-2012, of studies on school refusal. According to data from scientific productivity rates, a progressive increase in publications over time is observed. It follows that school refusal is a topic of current research and interest in their study is increasing.

Regarding the review of journals, only 4% represents those that have published more than 3 studies. Most notable are: Educational Review, Cognitive and Behavioral Practice and Psychology in the Schools. These magazines can be considered, for their degree of productivity compared to the rest, the main news sources in research on school refusal.

6. Conclusions

Through this bibliometric analysis a review of the scientific productivity is offered, for the purpose of facilitating facilitate the work of researchers who are interested in investigating School refusal, since it contains information about the specialized journals and the temporal productivity. Finally, It is hoped that this work will stimulate new research in this field due to the negative influence of school refusal in the development of children and adolescents.

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RELATIONSHIP BETWEEN ACADEMIC SELF-EFFICACY AND SELECTING MAIN IDEAS: STUDY WITH A SAMPLE OF CHILEAN ADOLESCENTS

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Abstract

Academic self-efficacy is an important variable in educational and psychological research because it has been positively associated with aspects of behavioural and school adjustment and academic achievement. The aim of our study was to analyze the relationship between academic self-efficacy and selecting main ideas in a sample of 625 Chilean adolescents, ranging in age from 13 to 17 years old. The academic self-efficacy was measured by the Escala de Autoeficacia Académica Percibida Específica de Situaciones Académicas (EAPESA) and selecting main ideas was measured with the subscale Selección de Ideas Principales of Inventario de Estrategias de Aprendizaje y Estudio - versión Escuela Secundaria. This subscale addresses students' ability to pick out important information for further study. Data were analyzed with binary logistic regression method. The criterion variable (selecting main ideas) was dichotomized into high (equal or higher scores than the 75th percentile) and low scores (equal or lower scores than 25th percentile). The proportion of correctly classified cases was 70.9%, and the Nagelkerke R^2 value was .25. We obtained a value of odds ratio of 1.17, which indicates that for every point that academic self-efficacy score increases, the probability of high attitude increases 17%. The results showed that academic self-efficacy beliefs were a positive and statistically significant predictor of high selecting main ideas.

Keywords: Academic self-efficacy, Selecting main ideas, Binary logistic regression.

INDIVIDUAL DIFFERENCES IN LEARNING DIFFICULTY

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Abstract

Correlates of adolescent learning difficulty may include a number of issues sustained across the life course but this is little documented. This study assessed the associations of learning difficulty with socioeconomic, behavior and health-related difficulties in early adolescence.

This study included 1,559 middle-school adolescents from north-eastern France, who completed a self-administered questionnaire gathering socioeconomic characteristics (gender, age, nationality, family structure, father's occupation, and family income), measured body mass index, alcohol/tobacco/cannabis/hard drug use, health status, back pain, allergy, depressive symptoms (Kandel scale), sustained physical/verbal violence, sexual abuse, social support, learning difficulty (a 4-item scale: lesson understanding, concentration/lesson learning, follow school pace/constraints, and school interrogations, range 0-4), grade repetition, low school performance (last trimester, <10/20), and school dropout contemplation at 16 years. Data were analyzed using multiple linear and logistic regression models. Learning difficulty score was strongly related to grade repetition (gender-age-adjusted odds ratio 1.56, 95% CI 1.38-1.76), low school performance (2.39, 2.08-2.75) and school dropout contemplation (1.79, 1.50-2.13). Learning difficulty was strongly related to socioeconomic factors (gaRC reaching 0.76). It was also related to alcohol, tobacco, cannabis, and hard drug use (0.22, 0.74, 0.71 and 1.25, respectively), overweight (0.17), obesity (0.43), poor health status (0.45), back pain (0.21), allergy (0.11), depressive symptoms (0.69), sustained violence (0.41), sexual abuse (0.72), and poor social support (0.22). These associations were partly explained by socioeconomic factors (contribution reaching 54% for various factors; it was 109% for alcohol use). These findings suggest that prevention to limit learning difficulty and promote school achievement should focus on socioeconomic, behavior and health-related difficulties in early adolescence.

Keywords: Learning, Adolescents, Individual factors, Family and socioeconomic difficulties.

1. Introduction

Learning difficulty is common in early adolescence (Swahn et al. 2012; Chau 2012). It favors grade repetition, persistent low school performance, and school dropout contemplation at 16 years without qualification. All individuals do not have an equal propensity to learning difficulty i.e. learning difficulty is not a random event but due to enduring individual difficulties which can alter physical, mental and cognitive capabilities. Individual difficulties include family and socioeconomic difficulties and also a wide range of health-related problems and violence sustained by adolescents (Chau 2012, Legleye et al. 2010). Prevention to reduce learning difficulty is thus crucial and should consider individual differences. Unfortunately, the role of family and socioeconomic difficulties, health-related problems, and violence sustained has been partly addressed. This study in early adolescence assessed the relationships of learning difficulty with socioeconomic factors (gender, age, nationality, family structure, father's occupation, and family income), alcohol/tobacco/cannabis/hard drug use, health status, back pain, allergy, depressive symptoms (Kandel scale), sustained physical/verbal violence, sexual abuse, and poor social support. These issues are known to be common in early adolescence and aggravated in early adolescence and adulthood (Chau, 2012).

2. Methods

The study population comprised all 1,666 students attending all of the middle schools in an urban area of Nancy, in Northeastern France. The investigation was approved by the *Commission Nationale de l'Informatique et des Libertés*. Respondent written informed consent was obtained. The study protocol included: an application to participate transmitted to parents via the students and data collection undertaken using an anonymous self-administered questionnaire during a 1h-class period, under the research team supervision (2010). The questionnaire was put in a sealed envelope and then in a closed box by the subject. The questionnaire included socioeconomic characteristics (gender, age, nationality, family structure, father's occupation, and family income), measured body mass index, alcohol/tobacco/cannabis/hard drug use, health status, back pain, allergy, depressive symptoms (Kandel scale) (Kandel & Davies, 1982), sustained physical/verbal violence, sexual abuse, social support, learning difficulty (a 4-item scale: lesson understanding, concentration/lesson learning, follow school pace/constraints, and school interrogations, range 0-4), grade repetition, low school performance (last trimester, <10/20), and school dropout contemplation at 16 years. In total 1,575 completed the questionnaire, of which 10 were of unknown gender or age, 9 were not completed appropriately, leaving 1,559 questionnaires (93.6%) for statistical analysis. The health and health-related behaviors of the sample were close to those of the French adolescent population (Chau, 2012). Data were analyzed using multiple linear and logistic regression models.

3. Results

Boys represented 49.9% of subjects. Mean age was 13.5 (SD 1.3). European and non-European immigrants represented respectively 3.5% and 3.5% of subjects. One quarter of adolescents lived with divorced/separated parents or in reconstructed families, 11.9% with single parents or other non-intact families. Half of subjects had low parents' education, 32.5% low father's social status (manual workers 25.0% and non-working 7.5%), and 17.7% insufficient family income. Alcohol, tobacco, cannabis and hard drug use affected respectively 35.2%, 11.2%, 5.6%, and 2.8% of subjects. Overweight affected 25.5% of subjects, obesity 10.6%, depressive symptoms 13.3%, poor health status 25.8%, back pain 50.6%, allergy 36.6%, sustained physical/verbal violence 16.2%, sexual abuse 3.7%, and poor social support 53.8%. Learning difficulty affected 29.5% of subjects (14.4%, 7.4%, 4.0% and 3.7% had score 1, 2, 3 and 4, respectively). School repetition, low school performance, and school dropout contemplation were also common: 14.7%, 8.2% and 3.8%, respectively. The learning difficulty score was strongly related to school repetition , low school performance, and school dropout contemplation (gender-age-adjusted odd ratios 1.56, 2.39 and 1.79, respectively).

Learning difficulty was strongly related to older age (gender-age-adjusted regression coefficient (SD)=0.074 (0.021)), being European or non-European immigrant (0.34 (0.14) and 0.76 (0.14), respectively, vs. French), living with divorced/separated parents/reconstructed family or single parent (0.34 (0.061) and 0.52 (0.081), respectively, vs. intact family), low parents' education (0.41 (0.051)), father's occupation (reaching 0.50 for manual worker and non-working, vs. managers, professionals, and intermediate professionals), and insufficient income (0.31 (0.068)). Learning difficulty was also related to use of alcohol (0.22 (0.057)), tobacco (0.74 (0.082)), cannabis (0.71 (0.11)), and hard drugs (1.25 (0.16)), overweight (0.17 (0.062)), obesity (0.43 (0.086)), poor health status (0.45 (0.059)), back pain (0.21 (0.053)), allergy (0.11 (0.054)), depressive symptoms (0.69 (0.077)), sustained violence (0.41 (0.071)), sexual abuse (0.72 (0.14)), and poor social support (0.22 (0.036)). These associations were partly explained by socioeconomic factors (contribution reaching 54%; it was 109% for alcohol use).

4. Discussion

Our study shows that learning difficulty was common and often resulted in grade repetition, low school performance, and school dropout contemplation in early adolescence. It reports strong individual differences in learning difficulty which were due to licit and illicit drug use, overweight, obesity, poor health status, back pain, allergy, depressive symptoms, and poor social support. This was expected because most of these issues affect physical, mental and cognitive capabilities as well as working performance (Chau, 2012; Kalmijn, 2002). Our study further reports that individual differences in learning difficulty were also due to violence sustained and sexual abuse. These maltreatments are well known to favor drug usage, depressive symptoms, hopelessness, and altered cognitive development (Chau, 2012), and thus physical, mental and cognitive capabilities. This study reveals that the associations between learning difficulty with health-related difficulties, unhealthy behaviors, sustained violence, sexual abuse, and poor social support were highly explained by family and socioeconomic difficulties. During the last decades, families are greatly changing leading to more children have fewer siblings and live with cohabiting, divorced/separated or single parents (Chau, 2012). A parents' separation/divorce often results in poorer living conditions (residence/living environment change, lower socioeconomic resources, and lower social support).

Limitations and strengths should be mentioned. This study was based on self-reported data which are widely used to study adolescent health. The participation rate was high (94%). Various measures have been used elsewhere (Swahn et al. 2012, Legleye et al. 2010). The prevalence of health/behavior outcomes was similar with that of French adolescents. Every effort was made to guarantee students' anonymity.

5. Conclusion

Learning difficulty was common and can lead to grade repetition, persistent low school performance, and school dropout contemplation without qualification in early adolescence. Individual differences in learning difficulty were due to a number of health-related difficulties, unhealthy behaviors, sustained violence, and poor social support. The association between learning difficulty and these issues was highly explained by family and socioeconomic difficulties. Prevention to limit learning difficulty and promote school achievement should help the adolescents affected to solve their learning problem. It should also focus on health-related difficulties, unhealthy behaviors, sustained violence, and poor social support, especially among the adolescents with family and socioeconomic difficulties.

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WATER USE STRATEGIES UNDER COMPETITION AND COOPERATION CONDITIONS

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Abstract

Natural scarce resources are often overexploited, resulting in drastic consequences for both society and the planet. An experiment was carried out in order to analyze which role have prosocialness and trust in the use of water as a limited resource under situations of competition and cooperation. To this end, 107 participants act as farmers by deciding how to cultivate and irrigate their ten field over ten years in the Irrigania Game simulation. Before the simulation exercise prosocialness and trust were assessed and participants were randomly assigned to the experimental conditions of competition or cooperation. The results showed that in the competition condition farmers and their villages used a more selfish strategy to cultivate their fields (they used less rainfed crops and more groundwater irrigation), which produced lower benefits. Moreover, Multiple Regression Analyses have shown that, under competition, benefits to farmers and their villages were reduced over time. We also showed through Boostrapping analysis that the selfish irrigation strategy fully mediated the relation between prosocialness and accumulated profits; prosocial individuals choose less selfish irrigation strategies, and in turn accumulated more benefit. Beside, moderating analysis have shown that trust moderates the link between prosocialness and water use strategy by strengthening the negative effect of prosocial tendencies on selection of selfish strategies. Then, we discuss the relevance to provide individuals and groups with some sort of cooperative framework for environment-related decision making, perhaps by creating formative and educational programs that allow individuals to experience (a) cooperation and (b) the benefits that cooperation has at a practical level; both for themselves, and for society and the environment which ultimately has a further impact on them. Moreover, our results indicate that social and educational programs oriented to the developpment of proenvironmental behaviors in individuals would benefit from taking into account the influence of both prosocial attitudes and trust.

Keywords: Competition, Cooperation, Prosocialness, Simulation, Trust, Water.

1. Introduction

Natural scarce resources are often overexploited, resulting in drastic consequences for both society and the planet. From a social dilemma perspective the decline of natural resources happens because individuals try to maximize their own short-term interests regardless of the repercussions for the community and the planet (Joireman et al., 2009; Steg & Vlek, 2009). Under scarcity behavior becomes more selfish (Gifford, 2011; Van Lange et al., 2013). However to cooperate implies to lay aside our self-interest to protect the interests of others (Tomasello & Vaish, 2013). To analyze the role of dispositional (prosocialness and trust) and situational factors (competition or cooperation) in the selection of water use strategies when water is a limited resource is therefore of potential interest.

2. Objectives and hypotheses

The main objectives of this study were to examine: (1) the behavior associated with water consumption from both an individual and a collective perspective; and (2)

how certain variables that influence pro-environmental behavior (prosocialness, trust, water use strategies, and earned income) mediate and moderate each other.

2.1. Hypotheses

H1. In the simulation both individuals and villages will earn higher net and accumulated incomes in the cooperation condition than the competition condition

H2. Individuals and villages in the competition condition will see their net profits reduce over time, whilst individuals and villages in the cooperation condition will see their net profits increase over time

H3. In the simulated competition condition individuals and villages will use a selfish strategy based on irrigating fields with groundwater, whilst in the cooperation condition both individuals and villages will use more prosocial irrigation strategies, combining different kinds of irrigation with rainfed agriculture

H4. Selfish strategies will mediate the relation between prosocialness and accumulated income such that individuals with the most strongly prosocial disposition will use less selfish strategies, which will result in higher accumulated income

H5. Trust will moderate the relation between prosocialness and selfish strategies such that trust will strengthen the negative association between prosocial disposition and selfish strategies

3. Method

3.1. Participants

107 students from the University of Córdoba (Spain): 70.5% women and 29.5% men (*M*age = 21.28, [18 to 27]; SD = 2.18).

3.2. Procedure

First phase: Prosocialness and trust assessment.

Second phase: Randomization of participants in the experimental conditions of cooperation (N = 52) or competition (N = 55). Cooperation condition: participants could talk to each other about strategies and income at the end of the years 3, 6 and 9. Competition condition: no interaction was allowed: at the end of years 3, 6 and 9 they can see recent annual incomes of their group members.

Third phase: Irrigania simulation (Seibert & Vis, 2012): a web-based game about the shared used of water. There are different villages, each comprising a number of farmers (participant) whom has to maximize net income by deciding how to use his or her 10 fields each year (the simulation ran for 10 years). Three irrigation options are available, each with different associated costs and revenues reflecting some aspects of reality: rainfed agriculture, river water irrigation, and groundwater-based irrigation.

3.3. Measures, analytical strategies and decision making

Prosocialness (α=.84) was measured using a short version (12 items) of the Prosocialness Scale (Caprara et al., 2005).

Trust (α=.87) was measured using an adapted scale (4 items) of the Greenhalgh and Chapman' trust scale (1998).

Decision making were measured through the Irrigania simulation: 1) rainfed agriculture: lowest costs, but lower revenue; 2) river water irrigation: fixed cost, but revenues may be reduced if the river water has to be distributed among too many fields in a village; and 3) groundwater-based irrigation: fixed income, but the costs increase if the depth of the groundwater increases.

Selfish irrigation was indexed as the difference between the number of fields under groundwater irrigation and the number of fields under rainfed agriculture (groundwater irrigation - rainfed agriculture), as the most extreme strategies, selfish and prosocial respectively.

Annual income depended on weather conditions during the previous year, the type of irrigation chosen and how the other farmers use the water resources.

Accumulated income was calculated for years 1 through 10.

4. Discussion and conclusions

The results suggest that individuals and groups in competitive situations cannot escape the vicious circle in which they are caught and so the conflict escalates, becoming increasingly destructive. In contrast, Cooperation seems to act as a protective factor against the conflict escalation that occurs as a result of the scarcity of resources. Results suggest that individuals and groups should be provided with some sort of cooperative framework for environment-related decision making, perhaps by creating formative and educational programs that allow individuals to experience (a) cooperation and (b) the benefits that cooperation has at a practical level; both for themselves, and for society and the environment which ultimately has a further impact on them.

5. Conclusions

The study indicates that, in situations of perceived vulnerability and when dealing with scarce natural resources, high trust levels are a prerequisite for engaging in cooperative pro-environmental behaviors, especially for individuals with low prosocialness. Our results indicate that pro-environmental educational programs would benefit from taking into account the influence of prosocialness and trust in students and adults.

Emphasize that our results suggested that participating in cooperative actions could constitute relevant previous experience, promoting the development of a cooperative framework that would foster more pro-environmental actions at both individual and collective level, which in turn would benefit the planet.

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A PSYCHO-STIMULATOR FOR THE POLICE INTERACTIVE TRAINING

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Abstract

In December 2012, the Police Academy in Szczytno (Poland) began work on a research project "Development of an interactive training psycho-stimulator for the Police". This project is being implemented with the Academy of National Defence and the ALTA company. The objective is to develop and implement innovative diagnostic and training system to assess and stimulate cognitive competence and psychomotor skills of police officers. The key tasks of the project should be to develop, among others:
• set of psychological tests to monitor the efficiency of cognitive processes such as: memory, perception, concentration and divisibility of attention, the ability to deduce;
• set of games – exercises that stimulate the development of selected cognitive processes;
• psychophysiological recorder to support training,
• set of psychological tests to assess the state of cognitive and psychomotor functions.
The project started from the identification of the key psychological characteristics, the evaluation and development of which may be useful in police work. To this end, interviews were conducted with police officers from various departments and specialization. The next step was to prepare a web application that allows for the exercise performance of selected cognitive processes and measure the progress of training. Tests to measure the level of specific cognitive skills have been developed and validated, as well as interactive games sets to develop these skills on a different level. At the same time works towards construction of a physiological recorder module are being done, which will enhance the training of elements of knowledge on coping with stress. Each step of the tasks will be subjected to examination of standardization, optimization and validation of the system.
The essential innovation is the introduction of ongoing research systems used to stimulate the cognitive competencies of police officers by designing exercises in the form of computer games and to enable the checking of the current mental shapes of policemen before assigning tasks requiring special predisposition.

Keywords: Psych-stimulator, Cognitive psychology, Psychophysiology.

The Police Academy in Szczytno (Poland) began work on a research project "Development of an interactive training psycho-stimulator for the Police" in December 2012. The main objective of the project is to develop and implement an innovative modular diagnostic and training system to assess and stimulate the cognitive competencies and psychomotor skills of police officers. The specific objectives of the project are: the development of a diagnostic system (evaluation) and training (psycho-stimulation), development of a psychophysiological module (necessary to extend the training of coping with stress), the development of an advanced test of cognitive and psychomotor competence, research on system optimization, the use of the developed technology demonstrator under dedicated conditions.

The first step of the project was to determination of key psychological characteristics, the evaluation and development of which may be useful in police work. For this purpose the authors used following methods: a survey conducted among police officers of the selected organizational units and analysis of job descriptions of police officers from the selected organizational units. The result of the second task

of the project is a set of games and exercises implementing computer online mental training, along with tests to monitor progress. Psychometric tests were performed (2 studies, attended by 120 people each). Next actions relayed on construction of the training system and development of interactive games to develop essential features such as: perceptiveness (detection and direction functions of visual attention), executive attention (concentration, divisibility, durability), working memory (range and speed of imaging the processed verbal, spatial and episodic material), decision making (speed and accuracy in the analysis of the problem and the forecasting of events), the efficiency of logical thinking and drawing conclusions. Subsequent level of activities is development of psychophysiological recorder to assist in training. The result of the task will be a device to assess the psychophysiological reactions (heart rate and galvanic skin response), integrated with games and software to analyze the results. Neuro Device Group Company elaborated the technical documentation: "The measurement of skin-galvanic reaction and pulse". The purpose of the module is to measure psychophysiological emotional responses by analyzing the skin-galvanic activity (and as required by other indicators) and pass the feedback to the testes person. In contrast to the classical biofeedback, the assessment of the performance on a regular basis (e.g. during the game) will not be possible, but only after its completion. It is expected that actively training individuals should focus on the task rather than on emotions. Interpretation of the results of the test will help to develop effective ways of coping with stressful situations. Described above activities are the present stage of implementation of the project.

Tasks for the future include: the development of an advanced test of cognitive and psychomotor competence, evaluation of the relevance and reliability of the test of current cognitive and psychomotor competence, validation of the training, validation of the apparatus for psychophysiological tests, psychomotor assessment of tests - elements of the diagnostic-training system; research standardization, optimization and validation of the system.

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EXPLORING THE EFFECTS OF PRINT EXPOSURE ON LEXICAL PROCESSING AMONG GREEK ADULTS

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Abstract

The term "*print exposure*" refers to the degree of investment a person dedicates in reading and literacy activities (Payne et al., 2012). Print exposure positively affects human cognition and language abilities (e.g., Ardila et al., 2010). For instance, voluminous-reading activities enhance memory performance (Hartley, 1986), the development of vocabulary acquisition (Elley, 1991) and language processing across life span (Payne et al., 2012). The aim of this work is twofold: (1) to replicate the positive relation between greater print exposure and the efficiency of orthographic and phonological word recognition processes in Greek, a morphologically rich language and (2) to develop print exposure measurements designed specifically for the Greek population. Participants are 97 Greek native speakers adults (age range: 18-80, *M* age= 35.7). Print exposure was assessed by the use of the Author Recognition Test (ART), Magazine Recognition Test (MRT) (Stanovich & Cunningham, 1992) and self-report assessing reading habits. Vocabulary performance was measured by the provision of a lexical decision online self-generated task. Results showed that, although greater scores were obtained for the MRT compared to ART both measurements were highly inter-correlated and allied with participants' self-reports, suggesting its' usability among Greek adults. Finally, the ART and MRT were found to be significant indicators of the word recognition processes, as derived by faster reaction times (RTs) on the Lexical Decision Task.

Keywords: *Print exposure, Lexical Decision, Author Recognition Test, Magazine Recognition Test.*

1. Introduction

Reading activity is a particularly difficult task to assess (Acheson, Wells & MacDonald, 2008). Traditionally, print exposure was assessed by asking participants to report their reading habits or by asking them keeping daily logs of those activities. However, both of these measures appear to be vulnerable to bias responding (Cunningham & Stanovich, 1991). To overcome this drawback, Stanovich and West (1989) developed the Author Recognition Test (ART) and the Magazine Recognition Test (MRT). These checklists consist of the names of authors or magazine titles intermixed with foil names of authors or title magazines (respectively). Participants are asked to indicate only those they recognize to be the names of actual authors or title magazines. Both of these tasks are believed to be immune to biased responses as participants are informed that guessing can easily be detected

This study uses the ART and the MRT in an attempt to replicate the relationship between print exposure and word recognition (Chateau & Jared, 2000; Elley, 1991) as measured by a lexical decision task. The lexical decision is a widespread-used task assessing word-identification yielding robust effects (Katz et al., 2012).This will be the first study using print exposure measurements among a Greek population and thus it furthers aims to develop these checklists specifically design for Greek adults.

2. Design and Methods

The study was conducted in Greece. Participants (N= 97) were both male and female Greek adults (age range= 18-80, *M* age= 35.7). To assure that performance on

the lexical decision task was not affected by dominant language all participants were monolingual native speakers of the Greek language.

Participants were administered the ART, MRT and asked to report the weekly hours spent in reading literature and magazines activities. The ART included 80 names of authors, half of which were in the literature area, best sellers and prized during the 2005-2014 period (real items) and the rest from other areas (traveling, cooking a.o.) (foils). This design follows the example of Mar et al. (2006). The MRT consisted of 40 real magazines that remain highly sold during the last decade (real items), intermixed with 40 names of Greek TV shows, movies or series (foils).

Participants also performed an online timed lexical decision task designed by the experimenters using the E-prime software (Schneider et al., 2002). The present task includes 20 illegal, 60 real and 60 pseudowords in Modern Greek. Illegal and pseudowords were created based on existing words beginning with a cluster. The first or the second consonant was replaced by another resulting to a cluster (in)acceptable in initial position for Modern Greek (http://speech.ilsp.gr/iplr/) (Protopapas et al., 2012). Both pseudo and real words varied with regard to type frequency (Ktori et al., 2008). Gender (masculine, feminine) and length of the words (two and three syllables) were also manipulated.

All of the tasks were piloted twice before the main study took place.

3. Findings

Overall, participants' mean accuracy was low (Mean: 10,0; S.D.: 8,4 for ART & Mean: 13,1; S.D.: 7,6 for MRT), indicating limited reading habits activities. A Pearson correlation analysis revealed a highly significant positive correlation between the ART and the MRT scores (r= .558, p= .000). Scores on the ART were also positively correlated with self-reports on literature activities (r= .258, p= .043) but scores on the MRT were not correlated with self-reports about magazines-reading activities (p= .95).

The performance on the Lexical Decision Task varied across conditions (illegal words: 89.8%; pseudowords: 83.7%; real words: 87.7%). The accuracy was highly positively correlated with respect to the words' status, but there was no association with the ART and the MRT scores (see Table 1).

Table 1. Accuracy mean scores across the lexical decision conditions and the ART, MRT scores

	MRT	Illegal words	Pseudo words	Real words
ART	**.558**	-.102	-.099	-.100
	.000	.363	.379	.373
MRT		-.195	-.150	-.186
		.082	.181	.096
Illegal words			**.943**	**.979**
			.000	.000
Pseudo words				**.924**
				.000

A further Pearson correlation revealed that greater print exposure resulted in faster RTs across all the conditions in the lexical decision task (see Table 2). Finally, RTs varied depending on the words' status, giving positive correlation across variables.

Table 2. Intercorrelations between study variables

	MRT	Illegal words	Pseudo words	Real words
ART	**.558**	**-.501**	**-.556**	**-,533**
	.000	.000	.000	,000
MRT		**-.249**	**-.438**	**-,361**
		.025	.000	,001
Illegal words			**.830**	**,651**
			.000	,000
Pseudo words				**,726**
				,000

4. Conclusions

This study shows that print exposure enhances word-recognition abilities, as already suggested in previous studies (e.g., Chateau & Jared, 2000). This can be seen by the positive highly significant correlations between print exposure and RTs across all conditions in the lexical decision task. The lack of an effect, however, between the word accuracy and print exposure is mostly likely due to the nature of the sample.

In other words, given that the participants were native speakers of Greek, it would be unlikely for them not to be able to recognize the words. However, word accuracy and print exposure could be better assessed in second language acquires of Modern Greek.

Additionally, given the positive and high correlation between the ART and the MRT, it can be speculated that these print exposure measurements can be used within the Greek adult population. However, it is advised that these checklists need to be updated and modified before their use as they include names of the best-seller and prized authors (ART) during the last ten years and popular magazines (MRT) at the time the study was conducted.

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DO PEOPLE WITH MORE EMOTIONAL INTELLIGENCE SCORE HIGHER ON NONVERBAL COMMUNICATION?

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Abstract

This study aims to analyze the possible relationships between emotional intelligence and nonverbal communication. A sample of 177 Psychology students completed the TEIQue-SF Emotional Intelligence Questionnaire. The resulting scores were used to divide the sample into three groups based on the mean plus or minus one standard deviation to analyze differences between the extreme groups. The two extreme groups (N= 30) were individually recorded performing the same activity. Three minute clips of each recording were used by expert judges to rate the nonverbal communication of each participant. Both the correlation and "Student t" test of differences between means confirm that the higher the emotional intelligence, the better the nonverbal communication. Other interesting results are also presented.

Keywords: Emotional intelligence, Nonverbal communication.

1. Introduction

Salovey, Mayer and Caruso (2002) and Mayer, Salovey and Caruso (2008) define emotional intelligence (EI) as the ability to perceive, understand, manage and use emotions. For Mayer, DiPaolo and Salovey (1990, p. 772) it is "the accurate appraisal and expression of emotions in oneself and others and the regulation of emotions in a way that improves the life". But emotions can be expressed both verbally and nonverbally, hence the ability to understand and interpret non-verbal communication (NVC) of the emotions of others becomes a crucial component of emotional intelligence. Therefore, with regard to non-verbal communication of emotions, do people who score high on EI are also better communicating emotions nonverbally?

2. Objectives and hypothesis

Main objective: to know it hypothesized relationship between emotional intelligence and nonverbal communication of emotions.

Hypothesis: People with a high score on EI, also will score high in nonverbal communication of emotions.

3. Method

3.1. Participants

Initially 117 subjects (97 women and 20 men, M = 19.56 years, SD = 2.433) first year students of Psychology Degree were involved. Subsequently, 30 (26 women and 4 men, M = 20.23 years, SD = 3.530) whose score on the TEIQue-SF was higher or lower than the mean plus/minus one standard deviation were selected.

3.2. Material

TEIQue-SF (*Trait Emotional Intelligence Questionnaire-Short Form*; Petrides, 2009) consisting of 30 items which are scored with a 7-points Likert scale (1= completely disagree, 7= completely agree) and provides an overall index of EI.

To evaluate Nonverbal Communication, an excel document was created , which contained 16 components of the NVC [gaze, facial expression, smile, body posture, body orientation, gestures, movement of legs/feet, head movement, self manipulations, personal appearance, paralinguistic (latency, volume, inflection/intonation, fluency/disturbance of speech, speech time, and speed)]. Each component was scored with a 7-points Likert scale.

3.3. Procedure

Four phases: a) On line performance of the EI Test; b) creating two extreme groups (mean ± 1 SD) and development of an instrument to assess the components of NVC; c) Recording of the 30 participants during 3-4 minutes while talking about a particularly sad event and another joyful event in their life. Participants did not know they were being filmed, so after recording they were asked to sign a document allowing us to use the recordings; d) Evaluation of clips by the five judges.

4. Results

4.1. Descriptive analyses

Table 1. Descriptive statistics of the initial sample.

	N	Mínimun	Maximun	Mean	SD
Age	117	18	30	19.56	2.433
EI total score	117	93,00	194,00	146.73	18.93

Table 2. Descriptive statistics of the 30 selected subjects from the initial sample.

	N	Mínimun	Maximun	Mean	SD
Age	30	18	30	20.23	3.53
EI total score	30	93.00	194.00	147.47	30.68
NVC total score	30	5.00	10.15	7.76	1.30

4.2. Reliability Test (global scale reliability was α = .962).

4.3. Correlaciones (Pearson´s r)

Table 3. Correlation matrix of the components of the NVC with EI total score

Components of NVC	r (NVC component, EI total score)
Mean gaze	.124
Mean facial expression	.357
Mean smile	.485**
Mean body posture	.318
Mean body orientation	.245
Mean gestures	.223
Mean head movements	.274
Mean self manipulations	.306
Mean personal appearance	.148
Paralinguistic components	
Mean latency	.587**
Mean volume	.426*
Mean inflection/intonation	.406*
Mean fluency/disturbance of speech	.500**
Mean speech time	.391*
Mean spedd	.536**
NVC total score	.423*

(*)Significant at 0.05 level (bilateral). (**)Significant at 0.01 level (bilateral)

4.4. Mean comparisons (Student´s t test)

Table 4 shows the significant differences between the lower and upper groups in relation to some of the components of nonverbal communication. And what interests us particularly is that the group that scores high on EI also scores higher in total NVC.

Table 4. Student´s t test of means differences between lower group and upper group in EI total score.

Components of NVC	Lower group	Upper Group	*t*	*p*
Mean facial expression	4.52	5.17	$t_{28} = 2.305$	p = .029
Mean smile	4.44	5.40	$t_{28} = 3.305$	p = .003
Mean body posturre	4.04	4.72	$t_{28} = 2.214$	p = .035
Mean latency	3.77	4.86	$t_{28} = 4.348$	p = .000
Mean volume	4.30	5.08	$t_{28} = 2.849$	p = .008
Mean inflection/intonation	4.11	4.86	$t_{28} = 2.643$	p = .013
Mean speech time	4.14	4.70	$t_{28} = 2.484$	p = .019
Mean speed	4.05	4.75	$t_{28} = 3.735$	p = .001
NVC total score	3.67	4.20	$t_{28} = 2.708$	p = .011

(*)Significant at 0.05 level (bilateral). (**)Significant at 0.01 level (bilateral)

5. Discussion and conclusions

The results confirm the hypothesis: the more emotionally intelligent people are better at nonverbal communication of emotions. Thus, the total score on emotional intelligence correlates positively and moderately with the overall score obtained in nonverbal communication. This positive and moderate relationship seems to come from mainly paralinguistic components (latency, volume, inflection, fluency, time, and speed of speech).

Student's t test performed on various NVC dependent variables between the two extreme groups from the EI score shows several significant differences. Thus participants who score high on EI are better in NVC in the following aspects: the facial expression, smile, body posture, latency, volume, inflection, speech time, speed and NVC total score.

It is in this way confirmed our initial hypothesis, to be significant differences in NVC for those who perform better at the EI test compared with those who perform worse. In other words: emotionally intelligent people have better skills in nonverbal communication of emotions.

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COLOR PERCEPTION AND MOTOR FUNCTION IMPAIRMENTS CORRELATES IN CEREBRAL PALSY CHILDREN

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Abstract

Cerebral Palsy (CP) designates a large group of motor and sensory defects caused by a non-progressive lesion of the brain that occurred early in life. In children with CP, the degree of motor impairment has been shown to be positively correlated with loss of visual acuity, in which the more severely affected children had worse visual acuity than that of less affected children. In this study, we measured the chromaticity discrimination of spastic CP children for the three protan, deutan and tritan color confusion axes. We evaluated 50 patients with spastic CP ranging in age from 6 to 15 years. Motor performance of the patients with spastic CP was assessed and classified according the GMFCS Scale. Positive correlations were found comparing the chromaticity thresholds and the GMFCS score, indicating the worse the motor impairment the worse the color discrimination. In conclusion, the chromaticity discrimination is generally reduced in spastic cerebral palsy children. The tetraplegic children have the worse color discrimination comparing to the other two spastic cerebral palsy groups, diplegic and hemiplegic. The chromaticity discrimination is proportional to the GMFCS score for all spastic CP motor impairment subgroups.

Keywords: *Color Vision, Cerebral Palsy, Perception Development, Rehabilitation, Clinical Psychophysics.*

1. Introduction

Cerebral Palsy (CP) designates a large group of motor and sensory defects caused by a non-progressive lesion of the brain that occurred early in life (van & Willemse, 1984). The most frequent and severe motor impairment in such children is spastic cerebral palsy (SCP) (Odding, Roebroeck, & Stam, 2006). Cognitive alterations, mental retardation, epilepsy and hearing loss are frequently associated with SCP (Robinson, 1973). In addition, ophthalmological disturbances such as oculomotor abnormalities, refractive error and visual acuity loss are often observed (Hertz, 1987).

In children with SCP, the degree of motor impairment has been shown to be positively correlated with loss of visual acuity, in which the more severely affected children had worse visual acuity than that of less affected children as measured by the Visual Acuity Card Test (Hertz & Rosenberg, 1992). We confirm those previous results correlating the visual acuity measured with the sweep visual evoked potential (sweepVEP) and the Gross Motor Function Classification System (GMFCS) score (Costa et al., 2001; da Costa, Salomao, Berezovsky, de Haro, & Ventura, 2004).

2. Objectives

Since we have found a consistent reduction in spatial resolution since the grating acuity is impaired in CP children using a sweep VEP paradigm (Costa et al., 2001; da Costa et al., 2004) and with behavioral methods (Costa & Ventura, 2012), in this study, we measured the chromaticity discrimination of spastic CP children for the three protan, deutan and tritan color confusion axes. Our hypothesis is that the

chromatic vision is generalized impaired and positively correlated with the degree of motor impairment as the visual acuity was.

3. Methods

We evaluated 43 patients with spastic CP ranging in age from 6 to 15 years (mean 10.1 years; SD 2.8) who were referred by the Physiotherapy Department of the Medicine Faculty of the University of Sao Paulo and had been given diagnoses and been followed up by them. This study followed the tenets of the Declaration of Helsinki. Informed consent was obtained from the subjects after the nature of the study was explained. An ophthalmological examination was performed for all subjects, to eliminate confounding pathologies, such as cataracts, retinopathy, or neuropathy. All patients had normal eye fundus and 20/50 or better best-corrected visual acuity. The control group, 53 healthy male subjects ranging in age from 6 to 16 years (mean 10.5 years; SD 2.8) were tested.

The evaluation of the color discrimination was performed using a color vision test for children (adapted by Goulart et al., 2008. Testing was conducted in a dark room with the patients positioned 2.5 m away from the monitor. The target consisted of a square that differed in chromaticity from the single neutral background (coordinates 0.1977, 0.4689 of the International Commission on Illumination [CIE] u' v' 1976 color space). The square size corresponded to 1.25degrees of visual angle at the test distance of 2.5 m. Both target and background were composed of small patches of varying sizes (0.5– 2 cm in diameter) and six luminance levels (8, 10, 12, 14, 16, and 18 candela [cd]/m2) randomly distributed in the display. We determine thresholds along the protan, deutan, and tritan confusion lines. Periodically, a control target at maximum saturation is presented, as a catch trial in a psychophysical staircase procedure.

4. Results

A small negative correlation was found between age and the chromaticity thresholds for the control group suggesting an increase in the color discrimination performance at aging. The opposite result was obtained for the PC children. Positive correlation was found for all the visual conditions. Considering the motor condition, the children with diplegia and tetraplegia contribute to those positive correlation results. The hemiplegic group has almost no correlation. Positive correlations were also found comparing the chromaticity thresholds and the GMFCS score, indicating the worse the motor impairment the worse the color discrimination.

The magnitude of the color discrimination loss was obtained normalizing the cerebral palsy children data. Tetraplegic children had higher color discrimination losses with a mean of five times worse discrimination than the control children. Diplegic and Hemiplegic children had similar losses with a mean of two times worse discriminations

5. Discussion

Color vision is impaired in the spastic cerebral palsy children. We evaluated the chromaticity discrimination along the three color confusion axis protan, deutan and tritan. In all of them the thresholds of discrimination were reduced compared to normal children. The tetraplegic group was the most affected showing higher thresholds compared to the other two groups, diplegic and hemiplegic. We did not found in the literature studies evaluating the color vision in cerebral palsied children. Our study has an important novelty since cerebral palsy is a disease studied for a long time, has a lot of information about the visual changes associated ophthalmologic findings of strabismus and lens accommodation paresis (Hertz & Rosenberg, 1992; Lo Cascio, 1977).

The color vision impairment we found is also related to the motor condition, since tetraplegic children had a worse function compared to diplegic and hemiplegic children. Similarly to the visual acuity studies we also found a positive correlation between the chromaticity discrimination thresholds and the motor function score obtained in the GMFCS within each motor group condition.

The developmental characteristic for the chromaticity discrimination was assessed by our study. We found that the chromaticity discrimination is under development since for the children of the control group we measured a negative correlation between age and the chromaticity thresholds obtained in each color confusion axis. It means that the older the children lower is the threshold. This is in line with the found of other studies that have been suggesting that the chromaticity discrimination is fully developed at the ending of the adolescence (Paramei, 2012; Ventura et al., 2003).

6. Conclusion

The color perception based on chromaticity discrimination is generally reduced in spastic cerebral palsy children. The tetraplegic children have the worse color discrimination comparing to the other two spastic cerebral palsy groups, diplegic and hemiplegic. The chromaticity discrimination impairment is proportional to the GMFCS score for all spastic CP motor impairment subgroups.

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EARLY VISUAL PROCESSING OF FACE: AN ERP INVESTIGATION OF THE IMPACT OF REGULAR CANNABIS CONSUMPTION

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Abstract

This research (included in the CAUSAMAP project), considering the current literature, aims at studying the impact of regular cannabis consumption on spatial frequencies perception during early visual processing of faces. Endocannabinoid system is involved in visual perception (Middletone & Protti, 2011). This system can modulate visual signals as early as the visual thalamus (Dasilva, Grieve, Cudeiro, & Rivadulla, 2011). Recent studies (Bossong & Niesink, 2010) suggest an inhibition of the glutamate neurotransmitter by cannabis consumption. This has been studied in rodents but still needs to be investigated in humans. A perceived object signal is decomposed in basic elements: spatial frequencies. These are early extracted during primary visual processing of complex stimuli. Low concentrations of glutamate have already been evidenced in patients suffering from schizophrenia. It was accompanied by impairments in low spatial frequencies (LSF) processing (Butler & Javitt, 2005). Therefore, we are looking for an impairment in LSF processing in cannabis smokers. Event-related brain potentials (ERP) were recorded during the presentation of non-filtered, low-, high- and band-pass filtered images (NF, LSF, HSF and MSF, respectively) of faces. Cut-off frequencies used were 8 cycles/image (c/img), 32 c/img and 8-16 c/img. Participants were healthy subjects, regular tobacco smokers, and regular cannabis smokers. They performed a gender discrimination task. The ERP components of interest were the N170 and the P1. Early results will be discussed regarding our hypotheses, methodology and the field literature. Identifying specific markers could enable early detection of schizophrenia decompensation among risk populations.

Keywords: Cannabis, Face processing, Spatial frequency, Event-related potential (ERP).

1. Introduction

Cannabis use is frequent among adolescents and young adults. A regular use of cannabis during this critical period may lead to cognitive dysfunctions (Crean, Crane, & Masson, 2011) or mental diseases (Chadwick, Miller, & Hurd, 2013) but the pathophysiolgy of theses remains unclear. We assume that the visual system might be a good candidate to modelise the impact of cannabis on brain functions because this system is well known and accessible to the methodology of electroencephalography (EEG).

Perception of an object starts with the visual system decomposing it in basic elements: spatial frequencies which are extracted during early stages of visual processing (De Valois & De Valois, 1988). Low spatial frequencies (LSF) are forwarded to the visual areas through magnocellular pathway whereas high spatial frequencies (HSF) are transferred through parvocellular pathway (Maunsel et al., 1999). Spatial frequencies are integrated in a dynamic processing to form coherent representations of complex visual objects such as faces. Studies on rodents have shown that cannabis

inhibits glutamate production. Also, endocannabinoid system is involved in visual perception and can modulate visual output as early as the visual thalamus (Dasilva, Grieve, Cudeiro, & Rivadulla, 2011; Middletone & Protti, 2011). Besides, a pathology reporting low concentrations of glutamate is schizophrenia. Magnocellular pathway's activity and LSF face processing are impaired in patients suffering from schizophrenia (Butler & Javitt, 2005).

2. Objectives

The CAUSAMAP study group aims at studying the impact of regular cannabis consumption on human vision. Our research takes part in this project by studying the impact of cannabis on low-level visual processing of complex objects.
Since the endocannabinoid system has an inhibition role on glutamate production, which is particularly involved in LSF processing and considering evidences from patients suffering from schizophrenia, our main hypothesis is based on an impairement of magnocellular processing in regular cannabis users. This would therefor lead to an impairement of LSF faces processing.

3. Method

This impairement will be assessed by behavioral response time and accuracy measures but also by event-related potentials (ERP). Due to its high temporal definition, this methodology is particularly appropriated to the investigation of early face processing. Our main outcomes, the ERP components of interest are the N170 and the P1. The amplitudes of the P1 component, evoked by the processing of low-level caracteristics, as spatial frequency and of the N170 are expected to be lower for LSF faces processed by cannabis smokers rather than by other participants.

Populations studied were represented by healthy participants, tobacco smokers, and cannabis smokers. Stimuli were spatially filtered and non-filtered faces. Photographs of female and male (same proportions, 14 female) faces without glasses, facial hair or make-up, and with neutral expression were used. All pictures were trimmed to remove background clothing and hairline. Resulting cropped faces were pasted on a grey background and Gaussian filtered using Matlab. Based on a review of previous studies (e.g. Goffaux, Gauthier, & Rossion, 2003; Goffaux, Jemel, Jacques, Rossion, & Schyns, 2003; Holmes, Winston, & Eimer, 2003; Tanskanen, Näsänen, Montez, Päällysaho, & Hari, 2005), cut-off frequencies were 8 cycles/image (c/img) for LSF, 32 c/img for HSF and 8-16 c/img for the band-pass filtered middle spatial frequency (MSF) faces. At a distance of 57 cm, these approximate, respectively, 1.30 cycles/degree (c/d), 5.21 c/d and 1.30-2.61 c/d. Afterward, faces were normalised for contrast and luminance (Willenbockel, Sadr, Fiset, Horne, & Tanaka, 2010). This control was used to assess that only spatial frequencies would be responsible for the effects found on variables. In each trial, a fixation point displayed at the centre of the screen for 100 ms, was followed approximately 300 ms (randomised between 200 and 400 ms) later by the presentation of the test stimulus during 500 ms. The offset of this stimulus was followed by an inter-trial interval of about 1750 ms (1500–2000 ms). Participants had to categorise faces on gender, and gave their response by pressing one of two keys with their dominant hand. This task was irrelevant with respect to the goals of the experiment, but was used to maintain participants' level of attention constant during the entire task. Participants performed 6 blocks of 56 trials (336 trials in total with 84 trials per condition). The order of conditions was randomised within each block.

4. Conclusion

Early results will be discussed regarding our hypothesis, methodology and the field literature. If this experiment brings the expected results, as a long term project, we could use it as the ground for an explicating model of the interaction between cannabis and schizophrenia.

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PSYCHOPHYSICAL SCALING OF SEXUAL ATTITUDE IN BRAZILIAN ADULTS

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Abstract

Sexuality and affectivity constitute a complex condition that involves the biological, social and psychological aspects We aimed to construct psychological distances among the discriminability of sexual attitudes. Eight descriptors of sexual attitude (nude, kiss, touch, tickle, rub, smell, moan, grab) were evaluated in a pairwise judgment paradigm, a well-known model of discrimination system described by the Law of Comparative Judgments. Ten adults (mean age of 31.6yrs, SD= 9.4yrs, 6 females) performed a pairwise judgment, Each pair of sexual descriptors was randomly presented 4 times for each subject in which half of presentations they had their order inverted A X B to B X A. Thurstone case V was used to compute the psychophysical distances of the descriptor. Descriptor order were kiss (0.196), nude (0.189), moan (0.162), grab (0.134), smell (0.107), touch (0.105), rub (0.105) and tickle (0.000), with their respective distances in the parenthesis. According to those distances we could allocate the descriptors in three categories: low sexual attitude – tickle; medium sexual attitude – smell, touch and rub; and high sexual attitude – kiss, nude grab and moan. In conclusion, the quantification of psychological distances by psychophysical scaling can contribute to understand the sexual attitude more objectively. Future studies are analyzing the use of psychological distances based on discrimination as an instrument to study the psychological domains of victims and sexual offenders.

Keywords: Sexual Attitude, Attitude to Health, Psychological Distances, Psychophysical Scaling, Clinical Psychophysics.

1. Introduction

Sexual attitude reflects any behavior that increases sexual excitement and sexual arousal. Many factors have been related with sexual attitude including gender, religiosity and sexual knowledge (Sumer, 2014). Understand sexual attitude is paramount for the vast approaches that psychological practice requires. Sexuality development (Ferreira et al., 2013; Lochlainn & Kenny, 2013),sexual education (Jankovic, Malatestinic, & Striehl, 2013), family care (Hatzenbuehler, Phelan, & Link, 2013), health promotion (Lally et al., 2014), sexual risk behavior (Naidoo & Johnson, 2013) and also in legal and criminalist spheres (Ruiz-Perez et al., 2013; Karakurt & Silver, 2013; Cyr, McDuff, & Hebert, 2013; Black et al., 2013).

Given the importance of this issue takes and the extent of related disciplines, new methods of objectively accessing sexual dimensions are widely developed and applied. The most of those studies are based in huge screening surveys (Benzaken, Palep, & Gill, 2011; Birukila, Brunton, & Dickson, 2013; Choi, Song, & Son, 2012) but only few have psychometric profile (Royer, Heidrich, & Brown, 2012).

2. Objectives

The small number of studies quantitatively evaluating distances between sexual attitudes motivated our study. Understanding the psychological distances between

these attitudes may be of great value in research and interventions. Thus, we aimed to construct psychological distances among the discriminability of sexual attitudes.

3. Methods

We evaluated 10 adults (mean age of 31.6yrs, SD= 9.4yrs, 6 females). This study followed the tenets of the Declaration of Helsinki. Informed consent was obtained from the subjects after the nature of the study was explained. Eight descriptors of sexual attitude (nude, kiss, touch, tickle, rub, smell, moan, grab) were evaluated in a pairwise judgment paradigm, a well-known model of discrimination system described by the Law of Comparative Judgments. The evaluation of sexual attitude discrimination was performed by a pairwise comparison task in which each pair of sexual descriptors was randomly presented 4 times for each subject. In half of presentations they had their order inverted A X B to B X A.

Thurstone case V was used to compute the psychophysical distances of the descriptors. The pair of stimulus presented to the observer results in a discrimination processes that have some value on the psychological continuum. Because of random fluctuations in the nervous system, repeated presentations of the same stimulus do not produce exactly the same perceptual effect every time but instead result in a variable discriminative process. The psychological scale value of the stimulus is designated as the mean of the distribution of discriminative processes.

4. Results

Descriptor order were kiss, nude, moan, grab, smell, touch, rub and tickle. Their respective psychological distances were 0.196, 0.189, 0.162, 0.134, 0.107, 0.105, 0.105 and 0.000 (Figure 1).

Figure 1. Psychological discriminative distances of the eight sexual attitude descriptors measured by pairwise comparison psychophysical scaling.
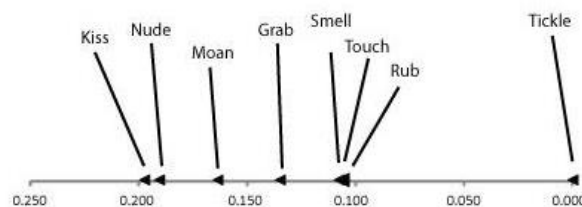
According to psychophysical distances we could allocate the descriptors in three main categories: low sexual attitude – tickle; medium sexual attitude – smell, touch and rub; and high sexual attitude – kiss, nude grab and moan.

5. Discussion

The possibility of objectively studying sexual attitudes puts a new perspective on psychological research on the subject. We show that the psychophysical scaling is an appropriate and informative for the assessment of sexual behavior method. Objective and quantitative measures of psychological distance can aid the understanding of how to judge sexual attributes.

The studies of sexual behavior, in most cases, are carried out in the form of large screenings searching for significant differences among distinct social groups (Benzaken et al., 2011; Birukila et al., 2013; Choi et al., 2012). The method we employ enables a more direct, objective and individual assessment, facilitating its application and more directed studies.

The importance of sexual behavior as a research object is large, since this topic of psychology can contribute in many other areas such as public health (Charmaraman, Lee, & Erkut, 2012; Makwe et al., 2012), risk behavior (Lally et al., 2014), development (Lochlainn & Kenny, 2013), crimes and misdemeanors.

6. Conclusion

In conclusion, the quantification of psychological distances by psychophysical scaling can contribute to understand the sexual attitude more objectively. In future studies we are intending to use the psychological distances based on pairwise discrimination as an objective and quantitative instrument to study psychological domains of sexual behavior issues.

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EXPLORING SADOMASOCHISM IN AN ADOLESCENT

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Abstract

Sadomasochism is a topic that challenges psychoanalytical theory. In this particular case, the failed role of the father is believed to be the origin of an elaborate sadomasochistic defense against fusion fantasies with the pre-oedipal mother. Perversion and adolescence are mixed in this case in which a teenage girl engages in choking sexual exchanges as a way to find pleasure in pain and please her sexual partner. The death drive, the beating fantasy and primary masochism are also topics included in the approach to understand this case. Following a case study methodology, the cause of sadomasochistic behavior in a teenage girl is explored. The patient´s material was obtained during psychological treatment at a program which is part of the Psychology graduate division at Universidad Nacional Autónoma de México. The patient was at the time a high school student at a public school in Mexico City and nineteen years of age. Using psychological tests, interviews, hermeneutic analysis and speech analysis, this paper is an attempt to amplify the understanding of sadomasochism.

Keywords: Sadomasochism, Adolescence, Psychoanalysis, Case study.

1. Introduction

Sadomasochism is present in all libidinal stages but there is a point where it becomes pathological and exhibits a perverse psychic structure.

While in treatment, Caroline was nineteen years of age, a senior in high school, an honor roll student and her extracurricular activities included learning a foreign language and painting. She requested therapy because she had family, memory and sexual problems.

When asked about her family problems, Caroline described a very dysfunctional family. Her father had been unemployed for ten years and lived with her mother in spite of being emotionally separated since Caroline was eight years old. Caroline says she never felt loved by him and one time he actually told her he didn´t want any more kids after Caroline's mother had a miscarriage before she was born. Her mother is a very successful professional. Before Caroline's parents separated, she used to accompany her mother to visit her lovers and was asked to keep it a secret from her father. When her parents separated, Caroline lived alone with her mother for many years and was very impressed with her mother´s ability to provide for them. Her mother often made comments about her weight even though Caroline was in good shape and Caroline expressed concerns about her mother´s sexual life and financial decisions. Caroline has an older brother who is seven years older.

About the memory problems she expressed on the first interview, she says that she remembered being hit by her father but when she asked her mother about it, she told Caroline he had never hit her.

When Caroline requested treatment, her sexual problems were her inability to feel an orgasm and she thought she might be gay. While in treatment she started having multiple sexual partners: once her date penetrated her in an alley without her consent, with another guy she was anally penetrated by "mistake" while they were changing sexual positions and with another guy, Luis, she permitted being choked. When talking about him, she said that Luis was sadistic and that she had a masochistic part.

The question that comes to mind with all of the above is what may have caused Caroline to develop a sadomasochistic behavior that endangers her life? I think it was the failed role of the father and the presence of a phallic mother with whom she has fusion fantasies that favored sadomasochism as a defense against this fantasies.

2. Design

This is a qualitative research that used case study methodology that attempts to deeply understand the phenomenon.

3. Objective

To explore a possible cause of sadomasochism in a teenager attempting to amplify theoretical understanding of sadomasochism on this stage of development.

4. Methods

During psychodiagnostic interviews the following psychological tests were applied: Beta III (Kellogg & Morton, 1999), Bender-Gestalt Test (Bender, 1938), Corman family drawing test (Corman, 1990), House-Tree-Person test (Buck, 1981), Draw a Person test of Karen Machover (Machover, 1949), Minnesota Multiphasic Personality Inventory-Adolescent (Butcher, et al., 1992) and Thematic Apperception Test (Murray, 1943). Psychological interviews, participant observation and the clinical history of the subject were the methods involved in the gathering of information. To analyze the information, apart from each test interpretation technique, hermeneutic and speech analysis were used.

5. Discussion

With the psychological tests applied, a borderline personality structure was diagnosed. It was during treatment that the sadomasochistic behavior became evident given Caroline's propensity to put herself in danger with her sexual conduct, more so when she had an insight and admitted a masochistic part of herself.

Primary masochism (Freud, 1924/2010) is constitutional and it is present in every libidinal phase. On the anal phase, masochism is present in the beating fantasy, which Freud (1919/2010) divided in three phases. Caroline expresses the second phase of the beating fantasy when she "remembered" being hit by her father. This phase is masochistic, passive and has graver consequences given the phallic organization suffers a regression to the anal phase because of the guilt generated by the incestuous love that remains unconscious and in that regression punishment becomes a source of sexual pleasure. The source of sexual pleasure for her was punishment which is why she hadn´t had an orgasm when she started treatment. The incestuous love she felt for her father probably was very intense, which propitiated a distant relationship between them as a protection against incestuous desires which in turn propitiated the failed role of the father not allowing him to be close enough to fulfill this function.

Feminine masochism (Freud, 1924/2010) is a passive position in sexual relationships. In Caroline's case this was evident given her attitude in her sexual encounters, putting herself at her partners' total control, more evidently when she let herself be choked to give her partner pleasure. Unconsciously, she was obtaining pleasure by being demeaned and from the physical pain of these acts.

Freud (1915/2010) establishes that sadism and masochism cannot be separated; they are always together as the two faces of a coin. On Caroline's case, masochism was more evident, but sadism was present as well. One time, she cut her hair by impulse leaving her haircut shapeless. She knew that would really upset her mother because when she was a kid her mother took really good care of Caroline's hair and said she liked it a lot. The cutting of her hair was an aggression directed towards

her mother; sadly it fell on her own self given the lack of clear distinctions between them making this a sadomasochistic act.

From Caroline's history, it can be inferred there was a failed role of the father. The father is who separates the mother-child dyad and gives the symbolic order to the child, giving him access to culture by prohibiting incest. (Dor, 1989) On Caroline's case the father wasn´t a strong enough figure to break the mother-child dyad, he didn´t show interest in his daughter which favored the illusion that mother and child were a whole unit. During the time Caroline and her mother lived by themselves, she rarely saw her father and as she was impressed by her mother´s ability to provide for them this favored the idea that her mother was powerful, a phallic mother, the mother of the pre-oedipal stage.

Given the failed role of the father, Caroline's relationship with her mother was incredibly close. There was no clear distinction between them and fusion fantasies arose. The fantasy to become one with the mother is something that is both desired and feared. (Perelberg, 1999) It is desired because it promises a state of absolute completion, where there is not want for anything. At the same time is something that is feared because if one becomes one with the mother, one can be annihilated. This is what favored the sadomasochistic behavior because if one controls the object there is a better chance to survive the encounter with it. Caroline had to control her relationships with sadomasochistic behavior to get the illusion of the fusional state she desired to repeat her relationship with her mother and enough control to keep annihilation fears at bay.

6. Conclusions

Everything contributed to favor sadomasochism in Caroline's behavior. The failed role of the father was caused by the intense incestuous desires on her part and the lack of interest on her by her father. This contributed to fortify the mother-child dyad which allowed fusion fantasies to arise. These fantasies were both desired and feared, which in turn propitiated the establishment of sadomasochistic ways of relating to others to repeat the illusion of the fusional state with the mother and also to permit her enough control as to avoid the fear of annihilation.

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IDENTITY DIMENSIONS AS PREDICTORS OF MARITAL BELIEFS IN POLISH YOUNG ADULTS

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Abstract

Objective: The aim of the study was to investigate the association between identity dimensions distinguished in the dual-cycle model of identity formation and marital beliefs. The hypothesis was that identity dimensions are good predictors of marital beliefs. *Design:* The study design comprised of correlational study in which participants were asked to fill in the questionnaires. *Methods:* Dimensions of Identity Development Scale and the Marital Meaning Inventory were administered to the sample of 291 students (155 females and 136 males) aged 20-25 years. The questionnaires were distributed across the different courses. A hierarchical regression analysis was used to analyse the data. *Findings:* The results indicated that exploration in breadth was predictive of belief Special status of marriage *vs.* neutral alternative, $F(5, 285) = 3.33$, $p = .006$, and identification with commitment was predictive of Mutuality *vs.* individuality, $F(5, 285) = 4.21$, $p = .001$. Higher levels of these identity processes were related to higher levels of these marital beliefs, $\beta = .25$, $p = .009$, $\beta = .24$, $p = .012$, respectively. *Conclusion:* Higher levels of exploration in breadth and identification with commitment were related to higher levels of beliefs that marriage is a special type of relationship, and that marriage requires spouses to surrender individuality and merge identities.

Keywords*: Identity dimensions, Marital beliefs, Young adults.*

1. Introduction

Recent studies also confirm the role of a strong sense of identity in the facilitation of achieving satisfying committed relationships in adulthood (e.g., Zimmer-Gembeck & Petherick, 2006), and the role of identity in the initiation, maintenance, and dissolution of intimate relationships in late adolescence and young adulthood (e.g., Klimstra et al., 2012). Apart from identity, one of the possible correlates of relationship status and marring in young adulthood may be also attitudes toward and beliefs about marriage (Mahay & Lewin, 2007). Marital beliefs and attitudes can influence satisfaction in dating relationships (Sullivan & Schwebel, 1995) and the nature of one's marriage, primarily regarding levels of distress, satisfaction, and communication negativity (Foran & Slep, 2007). One of the comprehensive investigation of marital beliefs resulted in a conceptualization of marital meaning along five interrelated dimensions (Hall, 2006). The first dimension was classified as a Special status of marriage *vs.* neutral alternative. The second dimension was classified as a Self-fulfillment *vs.* obligation. The third dimension was defined as a Mutuality *vs.* individuality. The fourth dimension was classified as a Romanticism *vs.* pragmatism, and the final dimension was Role hierarchy *vs.* role parallelism.

2. Design and Objectives

To the best of our knowledge, the current study is the first study aimed at investigation the linkage between identity dimensions as proposed by Luyckx and his colleagues (2006), and marital beliefs as distinguished by Hall (2006). Therefore, the current investigation, which is a part of a larger research project concerning identity, self-construals, romantic beliefs and marital beliefs in Polish young adults, is of exploratory nature. Regarding the exploratory nature of the study, we did not formulate several hypotheses. However, on the basis of prior research and theoretical notions

concerning identity processes and marital beliefs, we assumed that identity dimensions can be related to marital beliefs held by young adults. The study design comprised of correlational study in which participants were asked to fill in the questionnaires.

3. Methods

3.1. Participants and Procedure
The study was carried out on a sample of 291 university students (155 females and 136 males) from different faculties of Adam Mickiewicz University in Poznan, Poland. Participants were 20-25 years old (M = 22.29, SD = 2.05) and resided in a large Polish city with a population exceeding 500,000 inhabitants. All respondents were never married, had no children, and were heterosexual.

The first author distributed the measures to the participants across the different courses. The questionnaire packages were administered in classrooms to groups of 20 to 30 students at a time and participation was voluntary. The instructions were read aloud. An explanation as to the purpose of the study was given as was an assurance that the information provided would remain anonymous and confidential. Participants were also informed that they could resign from the study at any time.

3.2. Materials
The questionnaire package presented to the study participants was comprised of the following instruments: (1) *Demographic Questionnaire*. This questionnaire was designed to obtain general descriptive information about participants' background such as their age, gender, education, and current relationship status; (2) *Dimensions of Identity Development Scale* (DIDS; Luyckx, Schwartz et al., 2008) (Polish adaptation – Brzezińska & Piotrowski, 2010). It is an instrument designed to measure five identity dimensions. It consists of 25 items evaluated on 5-point Likert-type scales ranging from 1 = completely disagree to 5 = completely agree. It is a reliable instrument with a clear factor structure (Luyckx, Schwartz et al., 2008). In the current study, Cronbach alpha reliabilities were estimated to be .80, .79, .63, .89, .79 for exploration in breadth, exploration in depth, ruminative exploration, commitment making subscale, and identification in commitment, respectively; (3) *Marital Meaning Inventory* (MMI; Hall, 2006) (Polish adaptation – Adamczyk & Hall, 2013). It is a 21-item instrument to examine the meaning that the institution of marriage. It consists of five polarized and contrasting conceptualizations of marriage. These dimensions are as follow: (a) Special status of marriage *vs.* neutral alternative; (b) Self-fulfilment *vs.* obligation; (c) Mutuality *vs.* individuality; (d) Romanticism *vs.* pragmatism; (e) Role hierarchy *vs.* role parallelism. In the present study, Cronbach's alphas were as follow: .63 for Special status of marriage, .73 for Self-fulfillment, .61 for Mutuality, .60 Romanticism, and .61 Role hierarchy.

4. Results

To address the aims of the study, we performed hierarchical regression with an enter method. Data were analyzed using the Statistical Package for the Social Sciences SPSS 21.0. The significance level was set at .05.

The results indicated that exploration in breadth was predictive of belief Special status of marriage *vs.* neutral alternative, $F(5, 285)$ = 3.33, p = .006, and identification with commitment was predictive of Mutuality *vs.* individuality, $F(5, 285)$ = 4.21, p = .001. Higher levels of these identity processes were related to higher levels of these marital beliefs, β = .25, p = .009, and β = .24, p = .012, respectively.

5. Discussion

Our findings indicated the significant role of two identity processes for marital beliefs held by young adults. In particular, exploration in breadth (i.e., a process of

examining different alternatives in a life domain) was found to be related to the marital belief 'Special status of marriage vs. neutral alternative', which refers to the perception of marriage as the highest expression of love and intimacy and the most satisfying type of relationship, or being just one of many types of equally valid couple relationships (or simply a "piece of paper"). It seems plausible that this type of exploration as a process of searching for and examining various life options by young adults is also related to searching for and examining the meaning of marriage by an individual. In other words, this exploration may be associated with the pursuit of an answer to the question 'What does marriage mean to me as an individual?'. This question is, in turn, of key significance in young adulthood, when the search for a lifetime partner/spouse remains an area of significant interest and importance to young adults (Willoughby & Dworkin, 2009). Furthermore, the second identity process identification with commitment was predictive of the marital belief 'Mutuality *vs.* individuality', which incorporates ideas that marriage requires spouses to give up their individuality and merge identities, *vs.* marriage being compatible with (or even promoting) maintaining clear individual identities. Identification with commitment refers to the degree to which adolescents/adults feel certain about, can identify with, and internalize their choices (Luyckx, Schwartz, et al., 2008). It is plausible that the possibility to identify and internalize an individual's choices facilitates the perception of marriage as demanding the surrender of spouses' identities or as maintaining clear individual identities.

There is clearly a need for further research to more completely understand the role of identity processes for marital beliefs in young adulthood.

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CONFLICT WITH SIBLINGS[*]

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Abstract

Relationships between siblings are a permanent type of relationships which have a significant role and impact throughout life. Research shows that sibling relationships are characterized by increased conflicts during early adolescence and that high conflict levels in sibling relationships decreases slightly or stays stable between early and late adolescence. For this reason, the aim of the survey was to identify how adolescents perceive characteristics of conflicts with older and younger siblings. The survey dealt with actual conflicts which included adolescents as one of the sides in the conflict. The method of the recall of the conflict episode, with one week retrospection interval, was used to research the perception of the conflict characteristics. The survey was conducted on a sample of 530 adolescents. Statistically important differences, related to sibling's age, were determined with regard to the following elements of conflict: conflict initiation, conflict resolution strategy, affective tone upon conflict and conflict outcome and conflict impact on relationship. Obtained results show that roles of conflict in sibling relationships are mediated by siblings' age, as well as, by perception of the particular conflict characteristics.

Keywords: Siblings, Adolescence, Perception of conflict, Conflict episode, Actual conflict.

1. Introduction

Relationships with siblings in adolescence have been much less studied than relationships with parents, although this is a lasting kind of a relationship that can have multiplier effects on the overall development of adolescents (Rise and Dolgin, 2002). Older siblings serve as role models to younger siblings, which has a strong influence on the development of younger siblings (Santrock, 2003). If the difference between brothers and sisters is six, or more years, they essentially grow up in the same way as an individual child. When the difference is less than six years they often fight for power and attention from their parents, and they can be a threat to each other. This type of rivalry in some cases may lead to serious conflicts (Rise and Dolgin, 2002).

Research results show that sibling relationships are characterized by increased conflicts during early adolescence and that high conflict levels in sibling relationships decreases slightly or stays stable between early and late adolescence (Collins & Laursen, 1992; Laursen & Collins 1994). Interpersonal conflicts appear to be an inevitable part of adolescent's relationships. For example, adolescents report an average of 7.7 conflicts per day with rate varying according to the relationship type (Laursen, 1995). During one week, adolescents have an average of 47 conflicts with parents, 22 conflicts with siblings, 14 conflicts with peers, 7 conflicts with romantic partner, 4 conflicts with friends and 1-2 conflict with teachers (Petrović, 2008).

The most common reasons why conflict occurs between brothers and sisters are teasing, name calling, duties and chores, borrowing of clothes, invasion of privacy, special treatment by parents, embarrassment in front of peers and privileges (Raffaelli, 1922, 1997, Brown, 2008). The most common ways in which these conflicts are resolved are giving in, discussion, ignoring, compromise and talk about the conflict.

Boys are, more so than girls, prone to using physical force or threat of physical force as a mean of resolving a conflict (Goodewin and Roscoe, 1990).

As adolescents mature, they establish better relationships with their brothers and sisters, and the result is that the conflict relations are replaced by relations, which are mainly friendly and cooperative.

2. Objectives

The main aim of the survey was to identify how adolescents perceive characteristics of conflicts with younger and older siblings. The comparison was carried out in respect of the following characteristics of conflict: conflict initiation, conflict resolution strategies, outcome of the conflict and the impact that conflict has on sibling relations.

3. Methods

The research was conducted on a sample of 530 adolescents. The sample included two age groups – 6th grade of elementary school (49.8%) and 2nd grade of secondary school (50.2%). Mean age of participants was 12.63 and 16.62 years of age. Approximately equal number of boys (49.6%) and girls (50.4) participated in the research. All the participants were from two-parent families and had at least one sibling. The participation in the research was voluntary. All the adolescents who participated in the research had the written approval from their parents.

In this research, the method of recalled conflict episodes was used for data collection. The recall request was limited to the timeframe of one week, which is considered an optimum timeframe for obtaining valid data on actual conflicts (Petrović, 2009). A conflict was defined as a form of social exchange between two persons which involves confronting statements and actions. Such definition clearly separates conflict from aggression and violent behaviour.

The data was gathered using two measuring instruments: CPQ –Characteristics of Participants Questionnaire and CCQ - Characteristics of Conflicts Questionnaire (Petrović, 2008).

4. Results

One of the important characteristics of conflict is perception of own contribution and other side's contribution to conflict onset. This initial phase of conflict goes unnoticed by conflict participants and they often find themselves «in the middle of the battlefield», unaware how the conflict started and who started it. The results show significant differences in perception of conflict initiation depending whether other conflict partner is a younger or older sibling. Adolescents to greater extent perceived their own role in the conflict initiation with younger sibling while the conflict with older sibling was perceived as a result of mutual contribution ($\chi2$ (2) =10.29, p < 0.01).

Conflict resolution strategies represent behaviour of sides in a conflict that leads to its ending. This research examines to what extent adolescents use the following conflict resolution strategies in conflicts with younger and older siblings: (1) competition – use of power to fulfil own requests and insisting on own wishes; (2) compromise – partially giving in and abandoning own requests and wishes; (3) cooperation – negotiation with other side in order to reach optimum solution; (4) mediation - asking help for resolving conflict from third, neutral party; (5) accommodation – easy acceptance of other side's requests; (6) disengagement – interrupting the conversation or changing the topic. In solving a conflict with a younger sibling, adolescents increasingly use competition and cooperation, and when resolving a conflict with an older sibling they increasingly use accommodation and disengagement. These differences are statistically significant. ($\chi2$ (5) = 11:32, p <0.05).

Conflict outcome is the level at which participants in conflict fulfilled their initial goals. The research distinguishes the following outcomes of conflict: (1) win for participant (he/she fulfilled initial goals and the other side did not); (2) loss (other side in the conflict fulfilled initial goals and the participant did not); (3) compromise (both sides reached similar level of fulfilment of their initial goals); (4) mutual win (both sides fulfilled all their initial goals); (5) mutual loss (nether side fulfilled their original goals). It has been assessed that there is a statistically significant connection between sibling's age and conflict outcome ($\chi^2 (4) = 17.86$, $p < 0.001$). In conflicts with younger siblings, adolescents more often end up either winning or compromising. The outcome of a conflict with an older sibling is more often mutual win or mutual loss.

Impact of conflicts on sibling relationships tells about the following long-term effects of conflict: (1) aggravation (when conflict leads to aggravation of the sibling relationship); (2) no effects (when conflict does not influence the quality of sibling relationship); (3) improvement of relationship (when the conflict leads to improved quality of sibling relationship). There is no difference regarding conflict impact in conflict with younger and older siblings ($\chi^2 (2) = 5.55$, $p = 0.06$). Adolescents largely declared that the conflict did not affect the quality of the relationship with siblings.

5. Conclusions

The obtained results show that roles of conflict in sibling relationships are mediated by siblings' age, as well as, by perception of the particular conflict characteristics. Adolescents often initiate conflict when the other party in the conflict is a younger sibling and then increasingly use competition as a strategy for conflict resolution, but are also more willing to solve the conflict with the help of co-operation. Additionally, in conflicts with younger siblings, adolescents more often come out as winners or with an obtained compromise. On the other hand, conflicts with older siblings are characterized by a greater willingness to concede, or withdraw from the conflict. The result of greatest importance shows that conflicts with siblings have no effect on the existing relationship. This tells us that conflicts with siblings in adolescence have a specific developmental role i.e. that they serve as a platform for testing different strategies for achieving personal goals. In order to clearly comprehend the developmental function of conflicts with siblings, further research in this area need to be conducted.

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THE LINKAGE BETWEEN ROMANTIC BELIEFS AND ROMANTIC LONELINESS: A STUDY OF POLISH YOUNG ADULTS

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Abstract

Objective: The aim of the study was to investigate the association between romantic beliefs and romantic loneliness. The hypothesis was that romantic beliefs are good predictors of romantic loneliness. *Design:* The study design comprised of correlational study in which participants were asked to fill in the questionnaires. *Methods:* The Romantic Beliefs Scale (RBS) and the Social and Emotional Loneliness Scale for Adults (SELSA-S) were administered to the sample of 363 students (229 females and 134 males) aged 20-25 years. The questionnaires were distributed across the different courses. A hierarchical regression analysis was used to analyse the data. *Findings:* The results indicated that the only significant predictor of romantic loneliness is romantic belief 'Love finds a way', $F(1, 361) = 32.90$, $p = .000$. Higher level of this romantic belief was related to higher level of romantic loneliness, $\beta = .29$, $p = .000$. *Conclusion:* Young adults who endorsed the belief that true love can overcome any obstacle, reported the higher level of romantic loneliness.

Keywords: Romantic beliefs, Romantic loneliness, Young adults.

1. Introduction

People hold pre-existing beliefs about romantic relationships which subsequently affect their expectations and behaviors when they become involved in relationships with potential romantic partner (Baucom & Epstein, 1990). Prior research has demonstrated that romantic beliefs contribute for instance to variations in the trajectory of initiation and development of serious romantic relationships, relational satisfaction, dissatisfaction with marriage, and commitment (see Sprecher & Metts, 1989, 1999). One area of investigation, however, that remains unexplored in regard to romantic beliefs is the degree to which such beliefs held by young adults may be associated with romantic loneliness. This type of loneliness pertains to multidimensional approach to loneliness and it is associated with feelings of loneliness in domain of romantic partners (DiTommaso & Spinner, 1993). Regarding the associations between romanticism and various aspects of relational affect and development, and relationship stability, it seems plausible that since patterns of romantic beliefs may result in corresponding patterns of action (or inaction) oriented toward seeking a lifetime partner or maintaining a dating, romantic or marital relationship, they can be also related to loneliness experienced in a romantic domain.

2. Design and Objectives

To the best of our knowledge, the current study is the first aimed at investigation the linkage between romantic beliefs as as proposed by Sprecher and Metts (1989), and romantic loneliness as distinguished by DiTommaso and Spinner (1993). Therefore, the current investigation is of exploratory nature. Regarding the exploratory nature of the study, we did not formulate several hypotheses. However, on the basis of prior research and theoretical notions concerning romantic beliefs and loneliness, we assumed that romantic beliefs and romantic loneliness in young adulthood can be

related. The study design comprised of correlational study in which participants were asked to fill in the questionnaires.

3. Methods

3.1. Participants and Procedure

The study was carried out on a sample of 363 university students (229 females and 134 males) from different faculties of Adam Mickiewicz University in Poznan, Poland. Participants were 20-25 years old (M = 22.24, SD = 2.03) and resided in a large Polish city with a population exceeding 500,000 inhabitants. All respondents were never married, had no children, and were heterosexual.

The first author distributed the measures to the participants across the different courses. The questionnaire packages were administered in classrooms to groups of 20 to 30 students at a time and participation was voluntary. The instructions were read aloud. An explanation as to the purpose of the study was given as was an assurance that the information provided would remain anonymous and confidential. Participants were also informed that they could resign from the study at any time.

3.2. Materials

The questionnaire package presented to the study participants was comprised of the following instruments: (1) *Demographic Questionnaire*. This questionnaire was designed to obtain general descriptive information about participants' background such as their age, gender, education, and current relationship status; (2) *The Romantic Beliefs Scale* (RBS; Sprecher & Metts, 1989) (Polish adaptation – Adamczyk, 2013a) contains 15 items with Likert scale responses ranging from 1 (strongly disagree) to 7 (strongly agree). The RBS consists of four subscales labeled as follow: Love Finds a Way, One and Only, Idealization, and Love at First Sight. In the present study, Cronbach's alphas were .74 for Love Finds a Way, .80 for One and Only, .67 for Idealization, and .61 for Love at First Sight; (3) *Social and Emotional Loneliness Scale for Adults-Short Form* (SELSA-S) (DiTommaso et al., 2004) (Polish adaptation – Adamczyk, 2013b). The SELSA-S is a 15-item scale designed to measure emotional (romantic and family) and social loneliness. The items are rated on a 7-point scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Higher SELSA-S scores indicate higher levels of emotional and social loneliness. Cronbach's alphas for the current study were: .83 for the romantic loneliness subscale, .77 for the family subscale and .74 for the social loneliness subscale.

4. Results

To address the aims of the study, we performed hierarchical regression with an enter method. Data were analyzed using the Statistical Package for the Social Sciences SPSS 21.0. The significance level was set at .05.

The results indicated that the only significant predictor of romantic loneliness is romantic belief 'Love finds a way', $F(1, 361)$ = 32.90, p = .000. Higher level of this romantic belief was related to higher level of romantic loneliness, β = .29, p = .000.

5. Discussion

Our findings indicated that individuals who hold a higher level of the romantic belief 'Love finds a way' also report a higher level of romantic loneliness. This type of belief refers to the belief that true love can overcome any obstacles, differences, and problems that may arise in a relationship. This pattern of results can be understood if we refer to prior studies which revealed that some degree of romanticism appears to be useful to initiate and sustain a relationship (Sharp & Ganong, 2000), but at the same some, high levels of romantic ideals may lead to negative consequences (Murray &

Holmes, 1997) such as disappointment in a relationship, marital conflict, or even divorce (Glenn, 1991). Furthermore, spouses who had unrealistic or dysfunctional expectations and beliefs about marital roles, conflict, happiness, and other marital issues reported more marital distress, less marital satisfaction, and/or tended to display more negative communication and conflict resolution behaviors in their marriages (Hall, 2006). In the light of the above-mentioned prior findings, it is plausible to assume that the strong belief that true love can overcome any obstacles, differences, and problems, and, additionally, that true love can accomplish all this without the partners' engagement in resolving their relational problems, contributes to the increase of romantic loneliness. Moreover, the significant role of the romantic belief 'Love finds a way', which emerged in the current study, may indicate that the sense of problem and trouble resolution in romantic relationships are important for the sense of loneliness in the domain of romantic relationships.

The present study was not without its limitations. One major limitation is that the provided analyses leave causal questions unanswered. Although it is theoretically justified to assume that romantic beliefs, to some extent, may determine romantic loneliness, the possibility that romantic loneliness may influence romantic beliefs cannot be excluded. It is due to prior research indicating that romantic beliefs may lead to certain relationship outcomes, but also relationship outcomes can lead to adopting certain romantic beliefs (Sprecher & Metts, 1999). Longitudinal research is encouraged to give a better insight into the role of romantic beliefs for romantic loneliness.

There is clearly a need for further research to more completely understand romantic beliefs and their role for romantic loneliness.

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iPHONE APPLICATION FOR DEPRESSION SCREENING ACCOUNTING FOR MENTAL AND PHYSICAL COMMODITIES: A CROSS-COUNTRY COMPARISON SINGAPORE AND NEW ZEALAND

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Abstract

"Depression Monitor" is an Apple smartphone app was developed for this study and published on September 2012. This is a descriptive cross-sectional study. The questionnaire uses in the app is Patient Health Questionnaire "PHQ-9". The app collected data about demographics and depression was measured at two recommended cut-off points. This study is a comparison study between two countries, New Zealand and Singapore.

The number of app downloads (after 4 months) was 442. Of these, 279 (63.1%) were from Singapore (with 54.4% response rate) and 163 (36.8%) were from New Zealand (with 81.6% response rate). The mean age was (29.8, SD 8.3), 63.2% of users were female and 45.6% of users were (high school) educated level. 84.2 % of users were not previously diagnosed with depression.

The prevalence of participants with higher probability of depression in the sample for those who were not previously diagnosed with depression were (60.4%) at PHQ-9 cut-off 11, and (45.4%) at cut-off 15. There is a significant difference between New Zealand and Singapore in positive depression in our study in cut off 11 and cut off 15 and also in the health risks behavior. About 62% of participants with higher probability of depression at cut-off 15 from New Zealand have answered "Nearly every day" to the suicidal ideation statement that indicates a significant suicidal potential compared to 53% from Singapore. In terms of mental co-morbidities 9% participants with higher probability of depression at cut-off 15 from New Zealand have reported risky controlled substance use, and 22% risky drinking behavior, compared to 0% & 9% respectively in Singapore.

This study examined the feasibility of depression screening in general population via smartphone, and identified the willingness of users to download and use the app & large proportion of participants with potential depression that were not previously diagnosed.

Keywords: *Depression, Smartphone, Screening, Apps, Public Health.*

1. Introduction

Smartphone ownership is growing globally.(BinDhim etal. 2014a) Smartphone usage rates accounted for 51% of all mobile-phone handsets in New Zealand,(ANZA) and 88% in Singapore.(Blackbox research 2013) The utilisation of smartphone apps as a new modality to administrate depression-screening would bring the same advantages of the Internet screening, with the ability of the user to save their screening history on their device and easily export it to other modalities(e.g., email). Smartphone apps also could overcome the Internet's limitations such as when there is no Internet connection as the user can still benefit from the computational interactive function and static information in the app.(BinDhim etal. 2014b)

There are no studies attempting to investigate the feasibility of using smartphone apps for depression-screening or monitoring, and there is no data concerning who will be willing to download and use these apps if available among the app users and while utilising a cross-country comparison Singapore and New Zealand.

2. Methods

2.1. Design
This is a cross-sectional survey study. A free smartphone depression app ("Depression Monitor") was developed in the English language utilising the "Health Monitor" app template (BinDhim 2012) and released in Apple's app store in Singapore and New Zealand. The app collected data about demographics, previous depression diagnosis if any, other physical diseases (Charlson co-morbidity index), controlled substance use, alcohol consumption, depression–screening using the Patient Health Questionnaire (PHQ-9),(Kroenke etal. 2001), and the one item scale for anxiety. (BinDhim etal. 2013).

2.2. Participants
Consumers at the Apple app store, aged 18 and above were recruited passively over four months, downloaded this study app after agreeing to the terms and conditions of use, which includes the participants' information and consent agreement.

3. Results

The number of app downloads (after 4 months) was 442. Of these, 279 (63.1%) were from Singapore (with 54.4% response rate) and 163 (36.8%) were from New Zealand (with 81.6% response rate). The mean age was (29.8, SD 8.3), 63.2% of users were female and 45.6% of users were (high school) educated level. 84.2 % of users were not previously diagnosed with depression.

The prevalence of participants with higher probability of depression in the sample for those who were not previously diagnosed with depression was (60.4%; 45.3 in Singapore and 82.2 in New Zealand) at PHQ-9 cut-off 11, and (45.4%; 30.9 in Singapore and 66.3 in New Zealand) at cut-off 15. There is a significant difference between New Zealand and Singapore in positive depression in our study in cut off 11 and cut off 15 and also in the health risks behavior. About 62% of participants with higher probability of depression at cut-off 15 and not previously diagnosed from New Zealand have answered "Nearly every day" to the suicidal ideation statement that indicates a significant suicidal potential compared to 53% from Singapore. In terms of mental co-morbidities 9% participants with higher probability of depression and not previously diagnosed at cut-off 15 from New Zealand have reported risky controlled substance use, and 22% risky drinking behavior, compared to 0% & 9% respectively in Singapore. In terms of physical co-morbidities in those that had a positive depression score and not previously diagnosed at the cut-off 15 were 4% in New Zealand and 2% in Singapore. Finally, the proportion of participants with moderate or high anxiety in those who were identified with potential depression at the cut-off point 15 was about 77% in New Zealand and 67% in Singapore.

4. Discussion

Despite the recent emergence of the smartphone apps as a new medium for health intervention dissemination, this study has shown that a large number of people from Singapore and New Zealand were searching for, and willing to use, a depression-screening app. It has also shown that people were willing to share sensitive data about their health through a secure and anonymous app. In addition, this study has proven that smartphone apps can be used efficiently as a health research tool. Smartphone convenience and portable accessibility, global reach, and users' willingness to download and use health research apps and share their information anonymously, strengthens this growing media platform's potential to contribute to users' health, by providing information or screening tests, and self-help interventions that are always available for users when needed.

These results were also limited by the self-selected sample, although it did not affect the fact that a high proportion of them had a higher risk of depression and were undiagnosed and untreated.

5. Conclusion

Depression app can play a major role in screening and self-monitoring for depression and maybe a first-step intervention. Although there is still a greater potential to use smartphone applications with other mental health illnesses and chronic diseases, more effort is still needed in this area.

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INCLUSION OF RELIGION AND SPIRITUALITY IN PSYCHOTHERAPY: A STUDY OF CLIENTS' PERSPECTIVE

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Abstract

There is a growing evidence which suggests that religion and spirituality are positively correlated with mental health. However, despite the encouraging research support for inclusion of religion and spirituality in mental health, there is a lack of readiness. Majority of therapists are neither trained nor ready to include religion and spirituality in psychotherapy, and clients' attitudes and perceptions are generally ignored. This study aims to: (a) explore the clients' attitudes and perception towards inclusion of religion and spirituality in psychotherapy, and (b) assess the correlation between level of religiousness and perception towards the inclusion of religion and spirituality in psychotherapy. To assess the level of Islamic religiousness and attitudes towards the inclusion of religion and spirituality in psychotherapy, Psychological Measure of Islamic Religiousness (PMIR) and Client Attitudes toward Spirituality in Therapy Survey (CAST) were used respectively, along with the Global Religiousness Scale. The sample comprised of 96 Muslim clients who had either received or were receiving psychotherapy in the Kingdom of Saudi Arabia . Results of the study strongly indicated a preference towards inclusion of religion and spirituality in psychotherapy. Furthermore, a statistically significant positive correlation was found between the religious dimension of the CAST with the PMIR $r(81)= 323, p<.01$. These findings suggest large, prospective, multicenter studies to explore clients' preferences and identify training related features that influence psychotherapy. Further research regarding the spiritual and religious issues in psychotherapy, specifically in the Saudi cultural context is also recommended.

Keywords: Religion, Spirituality, Psychotherapy, PMIR, CAST.

1. Introduction

In the history of psychology, many of the pioneers of western psychology have disregarded the importance of religion and spirituality within psychology (e.g., Freud, Albert Ellis) (O'Connor, & Vandenberg, 2005). Different studies that surveyed Therapists from different parts of the world indicated the lack of training in graduate training programs for majority of the therapists (e.g. Hofmann & Walach, 2011). A meta-analytic review by Worthington, Hook, Davis, & McDaniel (2010) on fifty studies which had samples of Muslim and Christian populations corroborated the effectiveness of religious and spiritual therapy with an outcome that outperformed the standard secular therapy. A study by Vandenberghe, Prado, & De Camargo (2012) conducted on Brazilian psychotherapists showed that religion and spirituality were perceived by therapists as methods that promote a better treatment, a better coping and resilience for their clients. They perceived religion and spirituality as parts of their identity and also as empowerment tools for both the psychotherapist and the client. Moreover, a large survey done on German psychotherapists by Hofmann & Walach (2011), indicated that on an average, 22% of their clients raise issues related to religion and spirituality within psychotheraputic sessions. Furthermore, a meta-analytic review conducted by Post & Wade (2009), indicated that when coming to clients' preferences, several studies showed that many clients either want religion and spirituality to be included in their psychotherapy or are open for the inclusion of religion and spirituality in their psychotherapy. These findings suggest a stronger need of research in this area,

specifically in Muslim and Arab populations as previous researches have been conducted in Western culture and had negligible Muslim clients as their representative sample.

2. Objectives

The purpose of this study is to explore the Saudi Arabian clients' attitudes and perceptions towards inclusion of religion and spirituality in psychotherapy, and assess the correlation between the level of religiousness and perception towards the inclusion of religion and spirituality in psychotherapy.

3. Methodology

The researcher developed a 4-item scale in Arabic as the first phase of this study to investigate the perception of religion and spirituality in Saudi Arabian context since there were no specific definitions on how Saudi population view these concepts. During the second phase, participants filled out three surveys: The Client Attitudes towards Spirituality in Therapy Survey (CAST) (Rose,Westefeld, & Ansley 2001), Psychological Measure of Islamic religiousness (PMIR) (Abu Raiya, Pargament, Mahoney, & Stein, 2008) and Global Religiousness Scale (Abu Raiya et al, 2008). The derived basic definitions by majority of participants (through phase one) were provided in the beginning of (CAST) in order to clarify them for participants. The study utilized snow ball and convenient sampling approach to gather data.

3.1. Participants

Muslim clients who had either received or were receiving psychotherapy in Saudi Arabia. The sample comprised of 96 participants (73%) females, and (27%) males, (M= 29 years, SD= 10, R=57). Majority of the participants were Saudis and had a bachelor degree. Participants reported low levels of self-rated religiousness (M = 2.87, SD = .89) and moderate levels of self-rated spirituality (M = 3.26, SD = 1.07)

4. Results

Descriptive statistics of the CAST-R (religious dimension of the CAST) revealed that majority (64%) of the participants perceived inclusion of religion in psychotherapy as important, (25%) perceived it as unimportant, and (11%) of the participants were unsure. The percentages of the CAST-S (spiritual dimension of the CAST) were quite similar to the CAST-R as (67%) of the participants perceived the inclusion of spirituality in psychotherapy as important, (21%) perceived it as unimportant, and (12%) were unsure whether they prefer the inclusion or not. The results indicated a significant and positive correlation between CAST-R and PMIR, $r(81) = .32, p< .01$. Furthermore, all correlations between PMIR's subscales and CAST-R were statistically significant. There was also a significant positive correlation between CAST-S and one of the subscales (Islamic Ethical Principles) $r(85)= .23, p< .05$. No significant correlation was found between self rated religiousness and self rated spirituality (Global Religiousness) ($p > .05$) with the CAST. A one-way analysis of variance was conducted to evaluate the relationship between CAST-R and clients' relation with Allah. The independent variable, the clients' factor, included three groups who indicated that their relationship with Allah became better, worse or did not change with or after psychotherapy. The dependent variable was the score on CAST-R. The ANOVA was significant, $F(2, 85) = 12.2, p < .001$. Those who indicated that their relationship improved with psychotherapy had the highest preference for inclusion of religion in psychotherapy (M=23, SD=4) while those who indicated that their relationship with Allah didn't change had the lowest preference for the inclusion of religion in Psychotherapy (M=18, SD=5), while the group that indicated that their relationship with Allah became worse came in

the middle (*M*=22, *SD*=6). That was also quite similar for the (CAST-S) *F* (2, 85)= 6.9, *p* < .01.

5. Discussion and Conclusion.

The results supported the assumption that most clients of psychotherapy are in favor of inclusion of religion and spirituality. Level of religiousness was significantly correlated with the preference of inclusion of both spirituality and religion which seems to be consistent with some research done on Christian samples (e.g. Belaire & Young, 2002; Shumway & Waldo, 2012; Turton, 2004). Another intriguing finding of the study is, self-rated religiousness and self-rated spirituality was not correlated with the preference towards the inclusion. It indicates that clients' self-rated religiousness or spirituality is not associated with their preference for inclusion of religion and spirituality in psychotherapy. These results are parallel to many other studies done on participants of different religious affiliations which found the preference for the inclusion of religion and spirituality in psychotherapy (e.g. Post & Wade, 2009; Rose et al., 2001). The need for this inclusion is evidenced by an assumption made by the researcher that Muslim clients prefer to include religious and spiritual discussions in psychotherapy as it is a part of their identity. As the Saudi Arabian population is perceived religious, the results of this study show a significant correlation between Islamic religiousness and preference towards inclusion of religion and spirituality in psychotherapy. This ought to emphasize on the importance of discussion and awareness of these issues within the theoretical and practical field which should not be ignored anymore especially in the Saudi society.

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A.I.P.P.S. (ASSOCIAZIONE INTERNAZIONALE PSICOLOGIA E PSICOANALISI DELLO SPORT) APPROACH TO ADHD: AN INTERVENTION MODEL ALTERNATIVE/COMPLEMENTARY TO THE SESSION AND TO THE DRUGS

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Abstract

"Clinical" sport psychology is an instrument to deal with problems related to different relational aspects concerning individuals in the age of development, both preadolescents and adolescents, with special needs as well.

The use of this instrument is meant to prevent juvenile problems such as bad aggressivity working over and ADHD syndroms; to provide the integration and/or the reintegration of people physically and mentally ill into the social community and to deal with the "wellbeing" linked to games and sports features tout-court, particularly for those people belonging to therapeutical communities and/or custody communities (prisons, reform communities and so on).

Models of intervention in a clinical applied context will be described here. The role of clinical sport psychologists is to link sport practice to good applied processes. Psychologists have to carry out clinical projects of a great therapeutical value for the social community within those institutions which ask for them.

Keywords: Clinical sport Psychology, ADHD syndromes, Games.

Problems with ADHD children are difficulty in:
- keeping attention,
- impulse control,
- waiting their own turn,
- delaying the gratification,
- using the rule-governed behaviour,

and problems with disruptive behaviour. We lean towards a multi-factorial model (Pennington 2005) and the presence of several deficits that cannot explain singularly the variability of behaviour and cognitive difficulties of these children.

Considering *neuropsychological* model (Barkley) that brings back the difficulties to two kind of deficit: an inhibition deficit and an executive functions deficit: they involve the prefrontal, dorsal neostriatal and caudate circuit.

Considering *motivational* model (Sonuga-Barke), that brings back the difficulties to the gratification delaying ability ("Delay adversion" DAV): it involves the anterior cingolate and orbitofrontal cortex, ventral striatum and accumbens circuit.

Considering this multi-factoriality we need multi-modal treatments that consider both cognitive and motivational aspects.

Within the above mentioned problems related to ADHD, A.I.P.P.S. (Associatione Internazionale Psicologia e Psicoanalisi dello Sport) detected in the practice of sport a possible work setting since sport can modify some behaviour and attention difficulties these children have, acting as a multi-modal context in which the cognitive, problem solving, motivational-attributional and relational aspects can be handled by a clinical sport psychologist in order to intervene on the difficulties that he observes looking at the children.

Sport is highly motivating for every child: it acts as a codified play, regulated by precise interactions and rules.

Practicing a sport a child is introduced in a group of peers: to be part of the group means share the practice, its rituals, techniques, strategies and follow its rules: if you don't follow them you are 'out'.

A.I.P.P.S. invented the "sport and game room".

It's aimed at children between 3 and 7 years old.

It uses a sport setting and clinical psychological instruments to detect behaviour, attention and relationship difficulties in children of this age
It is focused on reading the behaviour and the movement in this context and also on the drawing and graphic symbol reading.

It structures the sport and game practice, introducing corrections through the handling of the way of communicating and the getting in touch with other people, the handling of game rules and role playing techniques in order to intervene on the observed difficulties using the sport context itself as auto-corrective.

Through this methodology the "sport game room" is really a clinical laboratory of intervention on the first ADHD symptoms detected in pre-school age and it's prevention and monitoring place for children of this age.

In the "sport and game room" children start with fencing, with all its involvements as dealing with the fight and aggressiveness, observing rules, respect and relationship with peers, attention times, technique learning, problem solving and causal attribution.

They can express themselves through drawing which at this age is the preferred way of communication and knowing their inner world.

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MARITAL QUALITY: WORK-FAMILY CONFLICT
AS A VULNERABILITY FACTOR

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Abstract

In this paper the authors present a research on job stress and work-family conflict and their consequences for marital quality and wellbeing. 90 heterosexual couples of Italian nationality fill out two questionnaires: an *ad hoc* multidimensional questionnaire that includes various dimensions of the marital quality and *work-family conflict scale*, by Carlson and Kacmar. We observed a more presence of *work interference with family* than *family interference with work* and some consequences of work-family conflict on marital quality. The authors conclude supporting the need for further studies on the topic not only to increase the knowledge about it, but also to promote prevention and educational initiatives of work-family conflict.

Keywords: Work-family conflict, Work stress, Marital quality, Couple communication, Intimacy.

1. Objectives

The interest of scientific researches in the topic of marital quality and stability has allowed focusing on the factors able to enhance or to hinder marital relationships, represented by risk and protective factors. Over the years one of the most studied risk factors is represented by work-family conflict. It is an external stressfull event to the couple and it is considered an important risk factor for marital quality.

In fact, the social changes of recent decades, like the massive increase of female partecipation in the labor force, despite the maintenance of traditional gender roles, can be potential psychosocial risk factors for individual and marital wellness and can generate an inter-role conflict arising from the incompatibility of family and work requests *(work-family conflict)*. We know that the increase of work-family conflict may decrease the positive communication among partners, their intimacy (like proximity and closeness) and effective coping strategies during their conflictual interactions (Ben-Ari & Lavee, 2007; Eldrige, Sevier, Jones, Atkins & Christensen, 2007; Frye & Karney, 2006; Lavee & Ben-Ari, 2007; Somech & Drach-Zahavy, 2007).

Starting from a multidimensional view of marital quality, the present paper aims to show the consequences of work-family conflict on marital quality and partners wellbeing.

2. Design

This is a cross-sectional study. Partecipants are a convenience sample of adult couples. Data are gathered in individual sessions. A self-report measure has been used. Descriptive and bivariate correlation are employed.

3. Methods

90 eterosexual couples of Italian nationality complete a personal data form, an *ad hoc* multidimensional marital quality questionnaire and a work-family conflict tool composed by 18 items (*work-family conflict scale* by Carlson & Kamar, 2000).

Marital quality questionnaire (Raffagnino, 2007) was built by an extensive and comparative review of the scientific literature. It includes the following criteria for

evaluating the couple quality: a) marital satisfaction and stability; b) dyadic adjustment of closeness and distance between partners (total distance and perceived distance); c) negative communication (includes communication patterns of escape-avoidance, violent aggression and expressed emotion between partners); d) dyadic coping strategies (such as distance/avoidance, denial and problem focused coping).

Work-family conflict was measured by the *Work-family conflict scale*, by Carlson and Kamar (2000), built on the basis of the definition of *work-family conflict*, which include three categories (work-family conflict based on time, strain and behavior) an two directions (work-interference with family and family interference with work). In particular, work-family conflict based on time refers to the conflict that occurs when the time of working does not allow partners to fulfill their family obligations. Work-family conflict based on strain regards the conflict which occurs when the tension, dissatisfaction, anxiety or fatigue, lived at the job context, make difficult the familiar performance by reducing the personal resources to carry out the domestic tasks. Work-family conflict based on behavior is the conflict that occurs when the required behaviors at the workplace are incompatible with the behaviors required by the family. Work-family conflict scale consists of 18 items divided in three groups (time-based, strain-based, behavior-based) and these groups, in turn, are divided in several subscales, one for each dimension of the work- family conflict. The criteria used in this tool are:

    a) work interference with family conflict (based on time, strain and behavior)

    b) family interference with work (based on time, strain and behavior).

Regarding statistical analysis, we employed Student test (comparison between means) to calculate the greater or lesser presence of the two directions of the work-family conflict (from work to family, from family to work) in the sample of our study. Then Bivariate Pearson correlation analysis was used to assess the two dimension of *work-interference with family* and *family-interference with work* in association with the dimensions of conflict: time, strain and behaviour (significance = 0,05). Besides the analysis allows to point out the relation between work-family conflict and marital constructs (such as negative communication, dyadic of closeness and coping).

4. Findings

Regarding *work-family conflict* some differences between the dimensions were found, in particular on the dimensions of conflict based on time and strain. In fact, the average scores of work-family conflict (time and strain) are significantly higher than those of family-work conflict (time and strain) (time: M=6,47; SD=2,34; t-Student=13,539; df=358; p=0,001; strain: M=6,34; SD=1,99; t-Student= 15,539; df=358; p=0,001). The sample of 90 couples shows greater presence of *work-interference with family* than *family-interference with work*. The effects of work-interference with family regard all the three dimension of the conflict (time, strain and behavior); so couples seem to sacrifice time, strain and behaviours to the family responsabilities for work obbligations.

Negative communication patterns are correlated to work-family conflict, expecially the escape-avoidance (r Pearson=0,18; p=0,04) is associated with work-interference with family based on time.

The expressed emotion (r Pearson=0,16; p=0,02) is correlated to work-interference with family, expecially with the strain work dimension, and violent aggression to home (r Pearson=0,166; p=0,04; r Pearson=0,13M p=0,047)

Dyadic closeness is correlated to work-family conflict: couples with work-interference with family show a diminished closeness to their partner (r =0,3; p=0,03). No correlation was found between work-family conflict and dyadic coping strategies.

In our research we found a greater presence of a work interference with family than family interference with work, as well as the empirical literature on work-family conflict highlights. Bivariate correlation analysis also confirm the interference of job activities (in terms of time, strain and behavior) on the marital quality. Especially we

observed negative effects on interpersonal communication (escape/avoidance, express emotion and violent aggression) and dyadic distance (Table 1).

Table 1. Bivariate correlation analysis

		Work-conflict based on Time	Work-conflict based on Strain	Work-conflict based on behavior
Negative communication (escape-denial)	**R**	0,034	**0,184**	-0,016
	Sign.	0,334	**0,044**	0,418
Negative communication (expressed emotion)	**R**	0,133*	**0,159**	-0,022
	Sign.	0,047	**0,022**	0,489
Negative communication (violent aggression)	**R**	**0,129**	0,072	**0,166**
	Sign.	**0,047**	0,178	**0,041**
Dyadic distance	**R**	0,002	-0,62	**0,401**
	Sign.	0,488	0,213	**0,018**
Perceived dyadic distance	**R**	0,093	-0.003	**0,304**
	Sign.	0,114	0,487	**0,029**

5. Conclusions

This paper shows the existence of a particular risk factor for marital quality represented by work-family conflict and its consequences for couples also thanks to a multidimensional vision of marital quality and stability that allows to consider marital relationships as a range of inter-related variables that influence each other.

This is a cross-sectional study and the results obtained are encouraging. Further studies with a greater number and different types of workers are needed to understand and clarify the role of work-family conflict as a vulnerability factor for marital quality. Instead future research could enrich our results by using a longitudinal design to study work-family conflict and its consequences on marital quality.

These researches will be important not only to increase knowledge on this topic, but also to promote prevention programs and health education and to develop psychosocial well-being addressed to couples and families at risk or coping with the consequences of work-family conflict.

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A PRELIMINARY INVESTIGATION OF STUDENTS'
WORK ENGAGEMENT AND ANXIETY

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Abstract

Student engagement has been identified as a key component for enhancing student's academic learning and achievement. However, the paragon of students' engagement towards academic and/or non-academic involvement may be serving as an antecedent to psychological distress. Therefore, the goal of the undertaken research is to: (a) assess the level of student engagement across academic years of study (i.e., freshman, sophomore, junior and senior), and (b) examine the correlation between student engagement and anxiety. Two instruments; Utrecht Work Engagement Scale-Student Version (UWES-9) and Anxiety scale (DASS-A) from Depression, Anxiety and Stress Scale (DASS-42) were used for the purpose of this research. The sample comprised of 432 female students who were enrolled at a university in Jeddah, KSA. Results of One-Way ANOVA supported the hypothesis that year of study had a differential effect on overall engagement. Additionally, student engagement was inversely related to anxiety, $r(430) = -.13$, $p < .01$. Further research is recommended to shed light on few additional nuances towards the investigation of students work engagement and anxiety.

Keywords: UWES-9, DASS-A, Student engagement, Anxiety.

1. Introduction

Over the past couple of years, our understanding of student engagement has benefited from several lines of research, including a shift towards "positive psychology" (Gauche, 2006). The concept of student engagement, which was initially closely associated with cynicism, burnout, dropout and poor academic performance has been expanded to a positive, persistent, fulfilling and work related state of mind (Schaufeli, Salanova, Gonzilez-Romo, & Bakker, 2002), and relevance to affective-cognitive factors such as social support and intrinsic motivation (Appleton, Christenson, Kim, & Reschly, 2006). This suggests that students confront many challenges while pursuing their educational paths and when such challenges are perceived as negative, engagement and/or motivation gets affected adversely.

A research conducted by Van der Merwe (2003) revealed that students who experience high educational demands such as meeting deadlines, running from class to class, complex decision making and an external locus of control (poor coping skills, lack of recognition and social support), experience high emotional exhaustion. Findings of Marais and Kirsten (1999) revealed that students who perceived their academic engagement as low, reported feelings of depression, despair, anxiety, fatigue and headaches. In another study Larcombe et. al., (2013) found that 40% of the total student sample reported severe levels of anxiety. Similarly, to examine the levels of stress and its effects in medical students, Abdulghani et. al., (2011) conducted a study at King Saud University and found that physical problems were associated with student's academic year, and prevalence of stress was higher during the first three years with females reporting higher levels of psychological distress. These findings suggest that students manifest a triad of behavioral, psychological and physical symptoms as part of their academics.

Therefore, the objective of the current research is to: (a) assess the level of student engagement across academic years of study, and (b) examine the relationship between student engagement and anxiety. To contribute to understanding the impact of student engagement on negative emotional state i.e., anxiety, UWES-9 and Anxiety scale from DASS-21 have been used by taking Effat University students as a case study.

1.1. Research Questions
a) Is there any significant difference between student engagement and collegiate levels e.g., freshman, sophomores, juniors and seniors?

b) Is there any significant difference between anxiety and collegiate levels e.g., freshman, sophomores, juniors and seniors?

c) Is there any significant relationship between student engagement and level of anxiety among female college students?

2. Methodology

The study utilizes a quantitative approach towards data analysis. Two instruments, Utrecht Work Engagement Scale-Student Version (UWES-9) and Anxiety scale (DASS-A) from Depression, Anxiety and Stress Scale (DASS-42) were used for the purpose of this research. The students reported average engagement ($M = 3.35$, $SD = 1.09$) and moderate anxiety levels ($M = 12.07$, $SD = 8.69$) as per the criteria of test developers (See Schaufeli et. al. (2006) & Lovibind (1995)). To address the study aims, a One-Way ANOVA was performed along with computing correlation.

2.1. Participants and Procedure
The participants of the study were adults who were enrolled at a private women's university in Saudi Arabia. The sample comprised of 432 participants ($M = 20.22$ yrs, $SD = 1.97$, $R = 16$) who were requested to respond to UWES-9 and DASS-A along with a demographic form. All prospective participants were sent a cover letter through internal email system along with a link to the questionnaire. They were provided with all the necessary information about the purpose of the survey, and were assured about confidentiality and voluntary participation.

3. Results

The results of the one-way analysis of variance (ANOVA) indicated a significant difference between student's academic year of study and engagement, $F(3, 428) = 3.63$, $p = .01$. Freshman ($M = 3.35$, $SD = 1.13$) and sophomores ($M = 3.56$, $SD = .90$) reported more engagement than did juniors ($M = 3.00$, $SD = 1.24$) and seniors ($M = 3.29$, $SD = 1.08$). Post hoc comparisons with the use of Dunnett's C test indicated a significant difference in the level of engagement between sophomores and juniors, but no significant differences between other groups were found. Furthermore, the ANOVA for year in college and anxiety was not significant $F(3, 428) = 2.05$, $p = $ n.s. Freshman ($M = 11.05$, $SD = 8.17$), sophomores ($M = 12.13$, $SD = 8.98$), juniors ($M = 14.20$, $SD = 9.30$) and seniors ($M = 12.68$, $SD = 8.74$) did not significantly differ on the reported levels of anxiety. Moreover, the correlation between student engagement and anxiety was weak $r(430) = -.13$, $p < .01$.

4. Discussion

Findings of the present study indicate that juniors and sophomores are less engaged than freshman and sophomore counterparts. Therefore, it would be useful to examine the factors associated with low and high engagement across collegiate levels. This work lays the foundation for future work examining the influence of motivating or de-

motivating factors such as credit hours, teachers support, and accessibility to resources, technical support and academic expectations towards student engagement. Work of Holgado et. al., (2013) has shown that grade point average is strongly associated with student's engagement and tends to be different for males and females. Therefore, by comparing students' academic performance with engagement has the potential to provide understanding of engagement and achievement. Further, the weak correlation between anxiety and student engagement suggests that engaged students tend to have low anxiety levels. This finding parallel Schaufeli et al., (2002), who found that student engagement was negatively correlated with emotional exhaustion. Future research will examine the role of student's gender, academic performance, perceived organizational support and credit hours on overall engagement and anxiety. The researcher is also interested in exploring whether reported engagement and/or anxiety levels would vary as a function of time. For example, in the present study, all data was collected at the beginning of semester which leads us to question whether the scores being average/moderate will hold towards the end of semester as well. Future research utilizing a pre-post design is recommended to further explicate the effects of student engagement and anxiety across collegiate levels.

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INTERCULTURAL SENSITIVITY OF SCHOOL PSYCHOLOGISTS IN SERBIA

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Abstract

Introduction: In Serbian context many of the schools face the challenge of diversifying classrooms regarding the cultural background of the students. The roles and responsibilities of the school psychologists in recent years have changed and the new guideline regarding the work of school psychologists in Serbia emphasizes working with various target groups and puts special emphasis on providing the quality education for students with special needs as well as the empowerment of teachers in their own role. *Objectives*: Based on Bennett's 'Developmental Model of Intercultural Sensitivity' (DMIS), the main aim of this research is to answer the question: How do the school psychologists perceive cultural differences among their students? Second aim of the research is to determine are there any differences in a way that school psychologists perceive the cultural differences of Roma students in comparison to other minority group members? *Methodology and sample:* The methodology for the presented research is structured according to the concept of Grounded Theory. For the purpose of this research, ten semi-structured interviews were carried out. All the data was analysed by content analysis. *Results*: The data analysis resulted in identifying main tendencies regarding the perception of cultural differences that reflect the ethnocentric and the transitional minimisation worldview of the respondents. *Conclusion:* The initial education and in-service training should take into account developmental level of the intercultural sensitivity of the school psychologist in order to support them to fulfil their role as changing agents of the current practice.

Keywords: School psychologists, Cultural differences, Intercultural sensitivity.

1. Introduction

After the political changes in a year of 2000 in Serbia several policy documents were developed in respect to education in order to improve the status of students from different vulnerable groups. The Law on the Foundations of the Education System was introduced in August 2009 promoting equal rights for every child, quality and efficiency of education, equal access to all levels of education, and horizontal mobility throughout the education system in Serbia. Even though the legislative in the field of education created framework for educational inclusion of the children from marginalized groups, there are some researches that suggest that some of these groups, Roma children in particular, are not included to the full extent. Some authors suggest that of the barriers for social inclusion of all children in Serbian context are the previous educational legislative and practice of placing minority children to special education schools, poverty, discrimination and prejudices present in schools (Macura-Milovanović, Gera, Kovačević, 2010). There are indicators that as many as 50% of school-aged Roma children are not attending school, usually dropping out at the point of transferring from class-based to subject-based instruction and that the completion rate for Roma children is approximately 20%. The research findings also indicate that the quality of education for Roma children is substantially lower than for the students from the majority group and that about 50% of Roma students do not develop even the basic mathematical and language literacy (Baucal, 2006).

Until the year of the 2009 one of the most important roles of school psychologists was the psychological assessment of students' intellectual capabilities which often resulted with placing Roma students in special education schools. The Law

on the Fundamentals of the Education System from 2009 and the current education system reform in Serbia significantly modify the demands which are being placed in front of psychologists in the education field, mostly through their increased engagement in the reform process and gaining new roles, such as supporting minority children and other children from vulnerable groups involved in primary education as well as supporting teachers and pedagogical assistants to better serve the needs of their students.

According to Bennett an individual's level of intercultural sensitivity including the respective beliefs can be seen as a crucial precondition for acting with intercultural competence (Bennett, 2004). His 'Developmental Model of Intercultural Sensitivity' (DMIS) conceptualises the development of intercultural sensitivity in different stages across the continuum from an ethnocentric to an ethnorelative worldview (Bennett, 1986, 2004). According to our knowledge there is no research that considers intercultural sensitivity of school psychologists.

2. Objectives

The main aim of this research was to determine how school psychologists in Serbian context perceive cultural differences and commonalities among their students. Considering the position of Roma minority in Serbia, as well as the research findings about the inclusion into the educational system, the second aim of the research was to determine if there are any differences in the way that school psychologists perceive the cultural differences of Roma students in comparison to other minority group members.

3. Methods

The methodology for the presented research is based upon a concept of Grounded Theory following qualitative approaches. In order to achieve having a sample of school psychologists with different amounts of experience in dealing with cultural heterogeneity the data was collected by 'theoretical sampling'(Charmaz, 1995). Ten semi-structured interviews were conducted with elementary school psychologists from Belgrade, Serbia. All participants were female and their age and professional experience varied significantly. The semi-structured interviews included questions on the respondents' perception of cultural heterogeneity, their experiences with cultural differences and similarities in school. In the second part of the interview, a hypothetical 'critical incident' was presented to the respondents. For this purpose, a short story involving a Roma student was invented that presented the respondents with a dilemma situation in which cultural differences had to be dealt with. The critical incident developed within this research is a modification of the critical incident that was used in recent research dealing with intercultural sensitivity of teachers (Petrović, Leutwyler, Mantel, Dimitrijević, Zlatković, 2013).

4. Results and discussion

The results of our analysis indicate that our sample is consisted of the respondents with predominantly ethnocentric worldview (two of the participants perceive cultural differences in a way that is typical for the stage of denial, and other three participants express the worldview of a person in polarisation stage). The five respondents from our sample expressed worldview with prototypical characteristics of transitional phase of a minimisation by Bennett.

The main tendencies regarding school psychologists' perception of cultural differences among the students were identified.

One of the typical tendencies was that school psychologists were focused on some other aspect of differences among the children (mainly socioeconomic status). The low socioeconomic status of Roma children is seen as the main obstacle for them

to have high learning achievement. Typically, these respondents would not discuss cultural differences among students unless they are disturbing the school routine. If this was the case, then the school psychologists would address this issue with a practical concern about school discipline or school regulations. According to the DMIS model this tendency could be an expression of the denial stage worldview.

The second tendency could be described as a constant process of comparing different cultures (minority in comparison with majority, but also the Roma and other minority groups), at a very broad level, stressing that there are some cultures that provide their children with adequate attitudes towards education, and some others (Roma to be precise) that do not value the education. Some respondents within this group expressed beliefs that Roma parents are using their minority position to gain some advantage or ask for unequal treatment. The perception of minority groups as homogeneous, regarding the attitudes and values, could be associated with the worldview typical for the polarisation stage of the DMIS model.

The third tendency that could be comparable with the characteristics of the minimisation worldview according to the DMIS model is expressed by the belief of the respondents that different cultures share the same values (value of the family, or the education itself). They stress similarities rather than differences between students of different cultural background and express the belief that the school psychologist in his/her work should appreciate the differences but also should hold a firm position when it comes to the basic principles of education.

5. Conclusions

We identified the three main tendencies that reflect the level of the respondents' intercultural sensitivity according to the Bennett's Developmental Model of Intercultural sensitivity. Regarding our second objective it can be concluded that the respondents who perceive cultural heterogeneity in a polarised manner tend to stress the differences among the minority groups. They perceive the values of the Roma culture as significantly different from the values of the majority and other minority groups and conflicted with the principles of education. The school psychologist in Serbian context are in a position to closely cooperate with all interested actors in educational process and their initial education and in-service training should take into account the developmental level of the their intercultural sensitivity in order to enable them to fulfil their role as changing agents of the current practice.

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WOMEN AND STALKING: THE IMPORTANCE OF GLOBAL ASSESSMENT IN WOMEN'S CRISIS CENTER

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Abstract

In this paper the authors present a pilot qualitative study aimed to know the information that the operators of the Women Crisis Centers require to women victims of stalking during the assessment interview. We conducted interviews (built on the basis of comparative and extensive analysis of the scientific literature) to 5 operators of two Women Crisis Centers, obtaining information on 22 female victims of stalking. The results allow to detect that the operators tend to leave out some information about aspects of violence that the scientific literature considers to be important for the knowledge of stalking. Some differences emerged between the two Centers. Considering the importance of the assessment interview to offer an efficient plan to help the victims of stalking, the authors conclude that it is essential to endow the operators of valid and complete interview outline.

Keyworlds: Stalking, Women's Crisis Center; Assessment.

1. Introduction

The phenomenon of stalking is widely hidden even today (Budd, Mattinson & Myhill, 2000; Biganzoli, 2006; Bagattini, 2012). In recent years much has been written about stalking, however further information and research are still necessary to understand and properly manage the multiplicity of the cases occurring. In this regard a crucial contribution has emerged from the Women Crisis Centers which offer care and support services to victims of violence. In these centers women, who work on a volunteer basis, conduct interviews to assess the actual threat for the victim and to help her to face the problem effectively. Although specifically trained to deal with this difficult task, these operators do not always follow the suggestions arising from research findings. Moreover, the research itself seldom focuses on the analysis and the effectiveness of the steps and contents of the interviews made by the center workers (Bagattini & Pedani, 2009; OSR, 2009).

2. Objective

In this paper we present the preliminary results of a qualitative and explorative research project aimed at understanding how Women's Crisis Centers in Tuscany usually address stalking in intimate relationships. In particular we have explored which kind of information workers obtain during the assessment of women, and which kind of assistance they provide for protecting and helping the psychological state of stalking victims. This pilot study is part of a wider research project about domestic violence.

3. Design

The study implies:
1) the analysis of the scientific literature on domestic violence and stalking to describe these social phenomena and identify the main recent evidence on these topics;

2) data about which kind of information workers ask or left out during the assessment interview with the women, comparing them with the information that the scientific literature considers relevant for the knowledge and the prevention of domestic violence;

3) the correspondence between services requested by the victims and services offered to them by the Centers;

4) the attention to different targets in various Women's Crisis Centers.

Descriptive analysis is used.

4. Method

On the basis of an ad-hoc interview outline, constructed taking into account an extensive and comparative review of the scientific literature, we collected data on 22 female stalking victims, interviewing 5 workers at two different Women's Crisis Centers; one of these deals with generic violence against women and the other specifically with stalking cases. In the first we conducted 9 interviews and in the second 13 interviews.

The interview outline is composed of different areas related to the situation of violence and it makes possible to collect information on: socio-demographic data, personal history and self-perception, motivational demand and help provided by the agency, kind of current violence, the stalker's characteristics.

Each interview lasts about 30/40 minutes, depending on the case's complexity and the availability of information. The workers had to answer our questions exclusively taking into account the information provided to them by the victims.

Obtained data are analyzed by qualitative methods.

Feedback from workers about tool's functionality is also included.

5. Findings

All the cases examined cover stalking between ex-partners. In 68% of the cases, stalking is the only cause of the request for intervention, while the other cases are associated with other types of violence.

The interviews concerned women who were between 18 and 59 years old, with a mean age of 38.4 years. 86.4% of the women are Italian. Only 18.2% of the victims are married, 31.8% are unmarried, while 50% of the women are separated or divorced. The prevailing level of education is lower secondary school (55%), while 25% have graduated high school and 20% have university degrees. The majority of the women are gainfully employed (59.1%) and 13.6% are unemployed. The remaining women include students, retirees and illegal worker. Victims heard about the Women's Crisis Center in various ways: advertising (22.7%), friends, relatives and acquaintances (22.7%) and law enforcement (22.7%). In smaller percentages, women learned about the center through other centers (13.7%), social services, internet and authorities. In most cases, women directly contacted the center (77.3%) and 71.4% accepted the help offered them by the center.

The analysis of the answers to the interview questions provided by the workers allows us to observe some important information is missing, highlighted by scientific literature as critical in stalking, relating to: the religion of the stalker (we have data for only one person), the religion of the victim (27.3% of information's availability), the family of origin of both ex-partners (respectively about 60% and 25% of data availability), the stalker's and victim's personality traits (about 38% of information are collected) and social environment (32% of data are not obtained)..

Furthermore, we found some differences between the two Women's Crisis Centers. For instance the workers at the center specialized in stalking are more focused on specific risks and protective factors regarding this type of violence than the workers at the other one. Thus, we obtained more information regarding violence and the dynamics of stalking from the workers at the specialized center; while workers of

the other center are less detailed about stalking and they provide more information about women's psychological and private areas.

Despite the differences pointed out, we can claim to have found within both centers a good responsiveness to victim's need. In fact, 73% of women were offered all the services that they had requested.

6. Conclusions

Despite the limits of our pilot study, overall for the small number of interviews carried out, some indications seem to emerge. The first regards the usefulness of the Women's Crisis Centers to meet the various needs of victims of violence and to gather data to increase knowledge of violence. The second concerns the utility of providing workers effective and exhaustive interview outlines in order to guide their interventions, given the importance of assessing the women for the subsequent planning of treatment offered to the stalking victims by the Centers. The third point refers to the importance of integration research and practice so that centers may benefit from research findings and vice versa; for their research, scholars can draw important information from field experience.

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CHANGING ATTITUDES AND BELIEFS

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Abstract

The paper deals with the relation of attitudes and beliefs to behavior and in particular with the predictive power of these cognitive contents in regard to behavior. The importance of the issue in democratic societies is emphasized, especially in view of the frequent failure to show relations between attitudes and behavior. Following the description of various attempts to bridge the gap of attitudes and behavior, the cognitive orientation theory is presented. This theory is a cognitive motivational approach with theoretical assumptions and a methodology that enable predicting different kinds of behavior. The prediction is based on cognitive contents representing four types of beliefs (about oneself, reality, norms and goals) referring not to the behavior in question but to its underlying meanings, identified by means of a standard procedure. Three studies are briefly described which demonstrate the advantage of the cognitive orientation theory in predicting behavior (communicating with others, concentration and adherence to diabetic regimes) over self-reports and personality questionnaires.

Keywords: Attitudes, Beliefs, Predicting behavior, Cognitive Orientation.

Changing attitudes and beliefs is a common theme in social psychology and is mainly of interest for investigators dealing with public opinion, persuasion and rhetoric. However, in the present context we will deal with changing attitudes and beliefs for the purpose of changing behavior. This should not come as a surprise to anyone who has followed the long history of the issue that came to be called in psychology "attitudes and behavior". This has become an issue because while beliefs and attitudes are considered as important in all ideologies, religions, and socio-political systems, for a long time studies in psychology have not been able to support the expectation that attitudes and beliefs are related to the behaviors to which they apparently refer. Thus, students who claim that it is dishonest to copy in exams have been observed copying in exams; restaurant owners who claimed one should not serve an ethnic group like the Chinese have been observed serving Chinese people when they showed up in the restaurant. The negative findings have been highly disturbing because they imply that the effort to teach values in education or the struggle for free access to information may be of no importance on the social scene (Kreitler, 2004).

The significance of the negative findings was exacerbated by the theoretical biases rooted in the two major theoretical approaches that dominated the scene at the same time: the behaviorist approach and the dynamic approach, both of which – for very different reasons - relegated cognitive contents to a secondary status, and denied its role in guiding behavior.

Due to the significance of the issue, valiant attempts were made to overcome the disturbing inconsistency by defining conditions under which attitudes could be expected to be related to behavior, for example, reducing maximally the time interval between the assessment of attitudes and behaviors; basing attitudes on direct experience; and selecting participants low in self-monitoring.

Studies of this kind, focused on filling in the gap between attitudes and behavior with different additional variables, have not made much progress in resolving the problem. Neither have the early models of cognitive motivation, such as, the model of achievement motivation, the model of reasoned action and the health belief model, all of which assumed that cognitions are related to behavior, via reasoned decisions,

goals, intentions and weighing of costs and benefits.

A major shortcoming of these models is that they do not deal with predicting actual behaviors but with self-reports of behavior or with intentions for behavior, both of which are known not to be identical with actual behavior. Further, the models are based on unrealistic and empirically unsupported assumptions about the production of behavior, for example, that behavior is based on careful reasoning and systematic utilization of the available information, and that it is produced by deliberate and conscious decisions.

Cognitive orientation (CO) is also a cognitively-based theory of motivation but it differs from the other models in its assumptions, components, methodology and empirical basis. It provides an account of major processes intervening between input and output designed to enable understanding, predicting and changing behavior. It shares with the other cognitive models the basic assumption that cognitive contents, viz. beliefs, meanings or attitudes guide behavior, but does not share with them the assumptions of rationality, realism, reasonableness, decision making, and voluntary control. Instead, it focuses on the major construct of meaning, and shows how behavior proceeds from meanings and clustered beliefs. The beliefs may orient toward rationality but also in other directions, and the outcome may seem rational or not regardless of the beliefs that oriented toward it. Further, the theory focuses on actual, observable overt behaviors as distinct from intentions, self-reported behaviors and commitments or decisions to act (Kreitler & Kreitler, 1976, 1982).

The CO theory consists of a central core model that refers to molar observable behavior but includes also further specific models that deal with physical health, emotional behavior, cognitive behavior and psychopathology. In the present context we will focus on the original model of molar behavior. There is a large body of data demonstrating the predictive power of the CO theory in regard to a great variety of behaviors, including achievement, responses to success and a failure, coming on time, undergoing tests for the early detection of breast cancer, smoking cessation etc. in different kinds of individuals, differing in age (4 to over 90), gender, ethnic background, education and IQ level (i.e., retarded individuals) and mental health (e.g., schizophrenics, paranoids) (Kreitler, 2004).

In the present context we will focus on one of the major advantage of the CO theory which is that it provides the theoretical and methodological tools for predicting behavior. The theoretical construct applied for predicting behavior is the motivational disposition which consists of beliefs characterized in two main respects: formally and in terms of contents. Formally, the beliefs refer to four types: beliefs about oneself, beliefs about rules and norms, beliefs about goals and beliefs about others and reality (general beliefs). In terms of contents the beliefs do not refer to the behavior in question but to themes reflecting meanings of the behavior in question that are identified in pretests by means of a standard procedure of systematic in-depth interviewing. A standard CO questionnaire includes statements that represent the themes in the form of four belief types and requires the respondent to state the degree to which he or she accept/agree to each of the statements by checking one of four response alternatives.

The following brief descriptions of studies are designed to demonstrate the predictive power of the CO theory in regard to behavior as compared with other alternatives.

The first study dealt with the behavior of initiating communication with others. The participants were 15 students of both genders. They were invited to participate in a psychological study. The first part consisted in asking them to sit in waiting room waiting to be invited to the lab. The waiting lasted for 15 minutes and took place in a room in the presence of other students whom they did not know. An experimenter was a hidden observer in that room and noted the number of occasions when the experimental subject initiated communications with the other students. This provided the data for the dependent variable. Three additional measures were used as independent variables: CO scores of forming relationships which included 10 items in

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each of the belief types referring to 10 themes (e.g., trust, self-disclosure) (Azuri…): the score on the AffiliativeTendency Scale (Mehrabian, 1976, 1994) with 26 items and responses on a 9-point scale; and a self-report measure (6 items) about forming relations and contacting others. The three measures were administered two months later by other experimenters in the context of various other questionnaires about other themes. The results showed nonsignificant correlations between the number of initiated contacts and the score on the Affiliative Tendency scale and the self-report questionnaire and significant correlations with the four belief types (r ranging .49-.62).

A second study dealt with the behavior of concentrating. Twenty students were administered the Meshulam cancellation test in which they were requested to cancel all forms of a given kind within 3 minutes without any errors. The three additional measures were the CO of concentration (Kreitler, 2013), a self-report measure of concentration and an evaluation by student friends who know the participant about the degree of his/her concentration. In this study the concentration score correlated significantly with the CO of concentration as well as with the report by others.

A third study dealt with compliance with doctors' instructions concerning glucose control in diabetic patients (Nurymberg, Kreitler & Weissler, 1996). The measures available in this study were the medical data concerning adherence of 52 diabetic patients in the last three months, the CO of adherence in diabetes, and the estimates of the doctor and of the nurse in charge who knew the patients and made their reports prior to checking the medical records. The medical records proved to be correlated with the CO of adherence scores but not with the overall impressions of the doctor and nurse.

The briefly described studies demonstrate the validity of the major conclusion that the prediction of behavior may indeed be made on the basis of cognitive contents but that these contents need to be of a special kind, namely, they need to represent beliefs of the four different kinds and to refer to themes of meanings underlying the behavior in question rather than directly to that behavior. Further, since actual behavior is not identical to self-reported behavior, the cognitive predictors of the latter cannot be the same as of the former. Notably, a careful analysis of the early attitude-behavior studies showed that in cases when the attitude questionnaires included statements referring to at least three of the belief types defined in the framework of the CO theory the predictions of behavior were at least partly significant (Kreitler, 2004).

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IN SEARCH OF AN APPROPRIATE NOTION OF SOCIAL SUSTAINABILITY

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Abstract

Social Sustainability and its implementation in organizations is a rising topic, in which we were interested in our latest research. When it comes to social sustainability, literature focuses predominantly on „high quality employees" with good or excellent education. However we were interested in organizations employing mainly staff members with low or "regular" education and low or middle income, some of them migrants with language others with verbalism problems. We therefore were conducting an explorative study with focus on these settings in a Swiss catering company (system catering).

The systems (= service units) we chose for data collection, were so called „good grove" units in terms of atmosphere and performance at large. The supposition was that those systems are already achieving their goals financially as well as with respect to HRM issues. Our aim was to understand how the individuals as well as the system in total produce sustainability.

In the workshop we first would like to present our research approach and findings. We then are interested in a discussion about the following issues:

- How can we appropriately describe people's life and working conditions while using a qualitative and hermeneutic approach?
- How can we as researchers come to a sufficient notion of social sustainability in the context of applied research?
- What is the possible meaning of social sustainability in workplace practice?

We address this workshop to academic researchers as well as to practitioners who are interested in the meaning of social sustainability in everyday work life. Maximum amount of participants: 18.

Keywords: *Social sustainability, Practical relevance, Field research, Applied Psychology, Research methodology.*

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