INTRODUCTION TO THE NEW SCIENCE OF GEOPSYCHOLOGY

CASE STUDY: THE EFFECT OF SCIESMOTECTONIC AND DOROUD FAULT ON ANXIETY

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Abstract: *Geopsychology is an Interdisciplinary science that is created of GEOLOGY and PSYCHOLOGY and its goal is investigation of geology factors on psychology factors. In this paper goal is investigating the effect of Doroud fault on anxiety. This research used a questionnaire and its information has been analysed with use of SPSS Software. Also the methodology for this research is Descriptive Statistics. On its base, this paper can say that earthquake have a deep effect on anxiety.*
Key Words*: Geology, Psychology, Geopsychology, Doroud Fault, Anxiety*

Introduction

This paper wants to inset the new science of geopsychology for first time in world. Because it seems that geology factors have effect on psychology factors. The goal of this paper is to investigate the effect of sciesmotectonic and Doroud fault on anxiety. This problem will show an area with an earthquake and people's reaction to it. Anxiety can be created by geological factors and be reduced by sport. The ability to cope with pressure and anxiety is an integral part of sports, particularly among elite athletes (Hardy, Jones, & Gould, 1996; Orlick & Partington, 1988). However, people who suffer from anxiety disorders, whether diagnosed or not, may not realize that this condition, given the appropriate therapy, is very treatable (Connell 2010). Anxiety disorders are prevalent in the general population (Kessler, et al., 1994) and can have a damaging influence on people's lives. Geopsychology is an interdisciplinary science that is created from GEOLOGY and PSYCHOLOGY (Fig. 1).

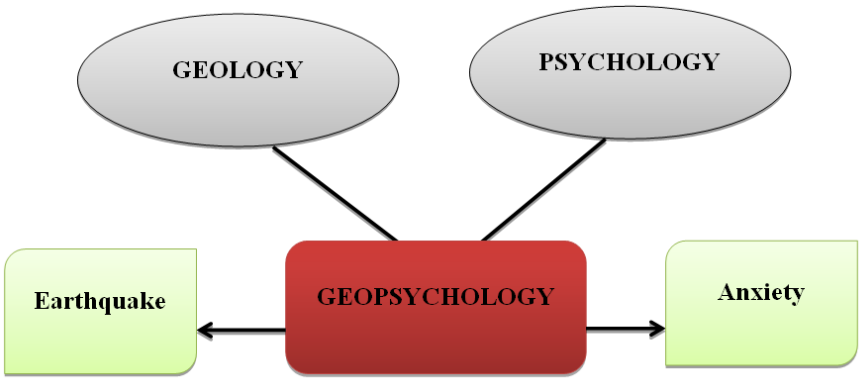
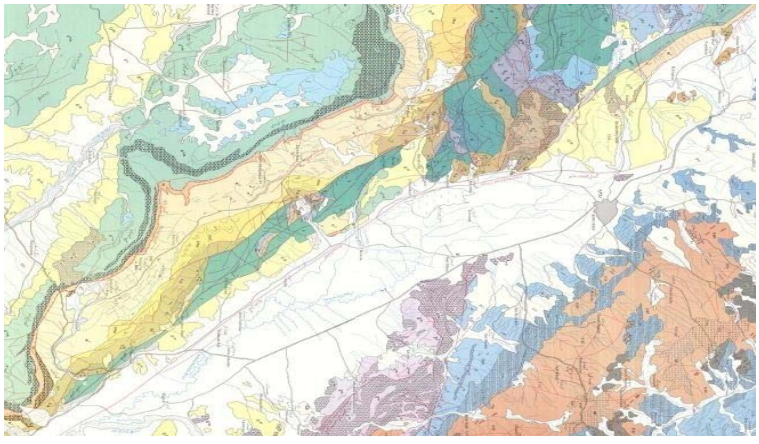


Fig. 1: Creation of new science with title " GEOPSYCHOLOGY"

Geological Settings

The NW-SE trending Zagros Mountains, part of the Alpine-Himalaya chain, extend for 2,000 km through Iran (Bahroudi & Talbot 2003). Together with its equivalent in the Arabian foreland, the Neoproterozoic to Neogene cover sequence of the Zagros fold-thrust belt hosts two thirds of the World's proven oil reserves and one-third of the World's reserves of gas (Beydoun, 1991). The Zagros Basin is defined here as lying between the central Iranian plateau in the NE, the Arabian Shield to the SW and the Taurides of Turkey to the NW (Alsharhan and Nairn, 1997). The Zagros Basin can be divided in three different ways. The simplest method divides the stratigraphy vertically into basement and sedimentary cover, with at least two important detachments in the Hormuz and Gachsaran salt sequences in different areas. A second subdivision distinguishes five structural zones along the length of the orogen (e.g. Stöcklin, 1968; Falcon, 1967, 1969, 1974; Berberian, 1995). Map (1) shows Doroud fault.

Map (1) Position of Doroud fault in Lorestan province



Geographical Settings

Dorud also Romanized as Dorūd, Dūrūd, and Dow Rūd; also known as Bahrain and Dorood Garan) is a city in and capital of Dorud County, Lorestan Province, Iran. At the 2006 census, its population was 100,528, in 23,596 families. The name Dorud means "where two rivers meet", where "Do" means two, and "rud" means river.

Map (2) Geographic Doroud In Lorestan Province

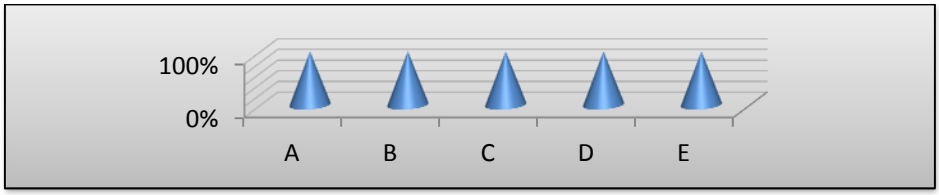
Methodology

Methodology in this paper follow-up from Humanities methodology. Material for this paper is a questionnaire that it is of closed type. The questionnaire has 6 questions that it should be answered by people in the studied area. The goal is 200 persons and the method for sampling operations is Simple Random Sampling. People are 100 men and 100 women. So any sample has an independent risk for Selection. The age range of people is between 20 – 70 years old. So it ranges divisible to 5 ranges (20 – 30) (31 – 40) (41 – 50) (51 – 60) (61 – 70). Statistics used in this study is descriptive statistics and the analysis is done with SPSS.

Result and Discussion

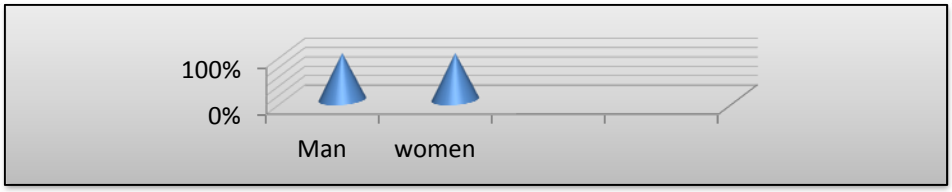
As mentioned the age of people is between 20 – 70 years old. The range (20 – 30) is Range A. The range (31 – 40) is range B. The range (41- 50) is range C. The range (51 – 60) is range D and the range is (61 – 70) is range E. In (Tab 1) we can see frequency of different ranges.

Tab 1: Ranges of age



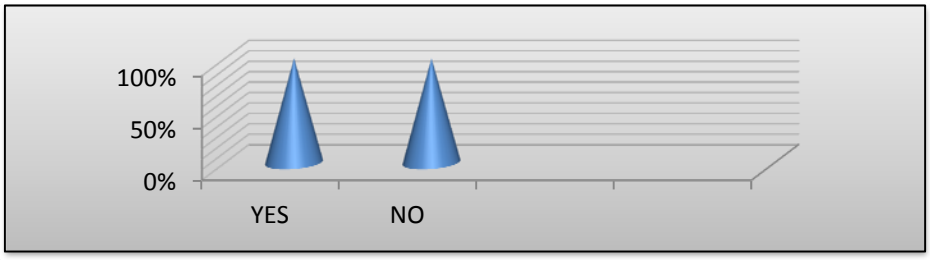
On based information can say that range B has most of the population and Range C has the minimum population. In addition, goal society in research is 100 man and 100 women, namely (50 % man & 50 % women). Tab (2) shows this case.

Tab 2: People of Research



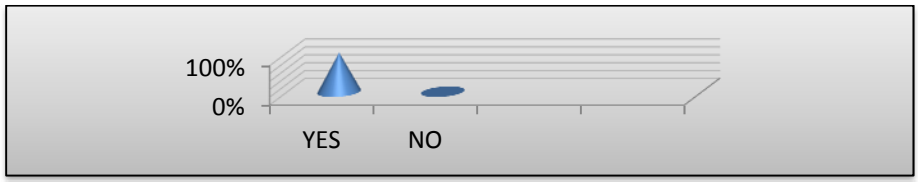
Question 1 in this paper is: Do earthquakes cause anxiety? This question can be a hypothesis that it is suggested in format a question. Note that: 94 % people believe that earthquake have an effect on anxiety. Only 8 % have answered (No).

Tab 3: Do earthquakes can cause you anxiety?



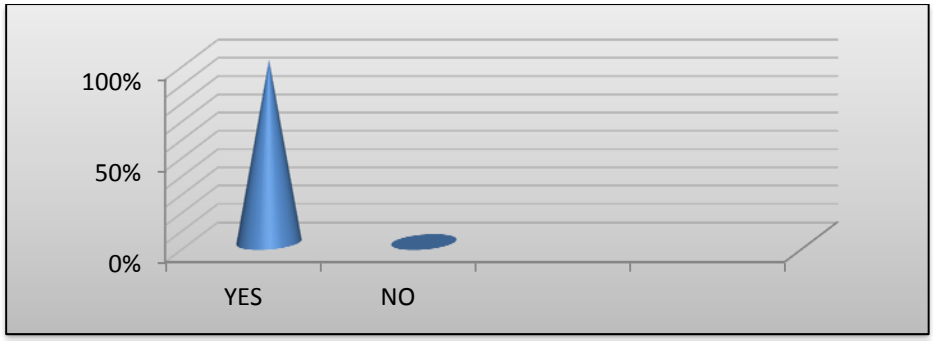
Question 2 is: To what extent you know earthquake as a critical factor? People think that earthquake is 100 % a critical factor. This problem is very important. .Because this area is a seismically active area and the frequency of earthquakes is high in this area.

Tab 4 : To what extent you know earthquake a critical factor?



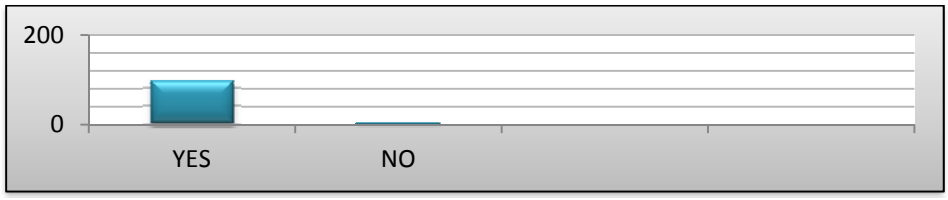
Question 3: To what extent are you afraid of earthquakes? This question is a fundamental question. Because fear and anxiety are related. 100 % people have a question (+). So can say that hypothesis is Verifiable.

Tab 5: To what extent are you afraid of earthquake?



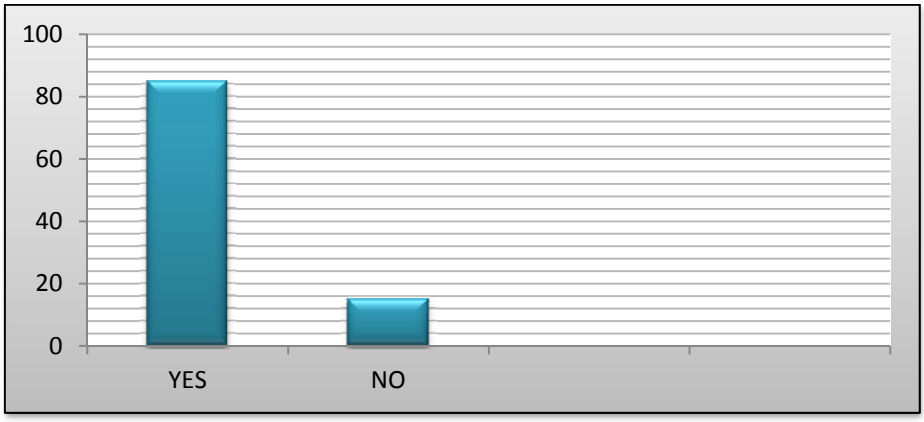
Question 4: To what extent earthquake can stir you relax? The relaxation is a positive point for any person. But I think that earthquake can stir relax and create a anxiety for any person. 97 % of people have belief that earthquake is a factor that can stir relax and create anxiety. So 3 % of person have a belief (-).

Tab 6: To what extent earthquake can stir your relax?



Question 5 is: To what extent earthquakes can be effective in your Behavior? 85 % People have answer (YES) and 15 % have answer (-). So can say that earthquake is a factor effect in people behavior.

Tab 7: To what extent earthquake can be effective in your Behavior?



Finally, we can say that Doroud fault is effective on anxiety of Doroud people .So Geology and Psychology have a relation with both and on this base this research can create a new science with title "Geopsychology".

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