EMOTIONAL CONTAGION IN MEDIATION

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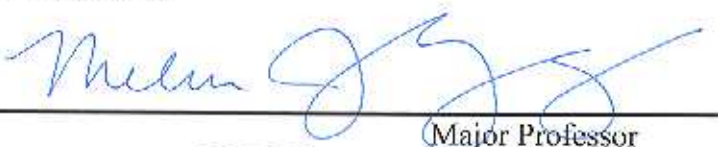

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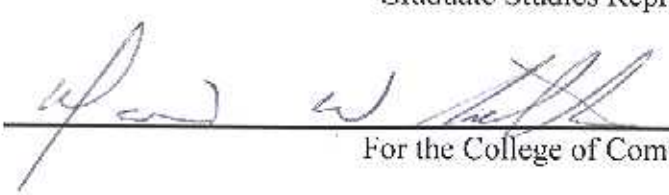

For the College of Communication

VITA

Erica Lee Gann was born in San Antonio, Texas on March 2, 1979. Erica received a Bachelor of Arts degree in Speech Communication from Sam Houston State University in August, 2001.

After graduation, Erica went to work for a small answering service in Houston, Texas called MessagePro, where she was the corporate trainer. After two years with MessagePro, Erica decided to take an offer as a consultant with a company called Lucidity, based in Plano, Texas. Erica performed system implementation consulting for Lucidity until August, 2004.

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ABSTRACT

EMOTIONAL CONTAGION IN MEDIATION

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Emotional contagion theory predicts the automatic and unconscious transferring of emotions from one person to another by way of mimicry and afferent feedback (Hatfield, 1992). Research has shown that communicators who are attuned to another's emotional cues may be more likely to stimulate emotional contagion. Because mediation requires participants to identify and attend to disputants' emotions, mediators may be susceptible to this phenomenon. Results of a quasi-experimental study support the hypothesis that emotional contagion affects mediators during mediation.

Emotional Contagion in Mediation

Mediation is a communication process through which people who are experiencing conflict meet with a neutral, third party in hopes of coming to a mutual agreement. Mediation has been utilized and found to be effective in contexts including international relationships, workplace conflict, community conflict, conflict in schools, and legal disputes (Wall, Stark, & Standifer, 2001). Mediators have the task of facilitating the process and helping disputants reach amicable solutions. Because mediators are expected to identify and attend to the emotions of the disputants and themselves during mediation, recently researchers have been striving for a better understanding of and appreciation for the role of emotion in mediation (e.g., Jones, 2000; Retzinger & Scheff, 2000; Shapiro, 2002). Although some researchers have started investigating emotions experienced by disputants, almost no research has been conducted on the emotional experiences of mediators during mediation.

Research on mediators' emotions during mediation is warranted because of the effects mediators' emotional experiences have on the goals and solutions of mediation as a communication process. According to Jones and Bodtker (2001), emotions experienced by mediators may impair their performances during mediation by increasing behavioral demands and affecting perceptions. For example, mediators experiencing a negative emotion such as anger may be less likely to maintain a neutral role, and may take sides with the disputant they feel has the stronger case. Emotional contagion, or the automatic process of one person "catching" another's emotion, is a specific area that could be a debilitating factor for mediators. Mediators experiencing emotional contagion may find it more challenging to be neutral, more difficult to identify underlying issues of the

disputants, and less likely to help disputants develop creative solutions (Jones & Bodtker, 2001).

The purpose of this study is to determine whether emotional contagion is a concern for mediators during mediation. The first objective of this study is to determine if mediators are susceptible to emotional contagion during the mediation process. The second objective of this study is to examine if a person's susceptibility to emotional contagion can be predicted. These questions are important because mediation training emphasizes the need for mediators to identify and attend to the emotions of the disputants and themselves during mediation. According to emotional contagion theory (Hatfield, Cacioppo, & Rapson, 1992, 1993), discussed in detail later, emotional contagion is an automatic process. Therefore, mediators should become aware of their susceptibility to emotional contagion during mediation.

Review of Literature

Mediation is a communication process wherein people engaged in conflict engage in dialogue and discourse in hopes of resolving their problems in a collaborative manner (Strasser, & Randolph, 2004). Mediation is a form of dispute resolution in which a mediator acts as a neutral third party who facilitates a problem-solving process in hopes of getting disputants to reach an agreement. Like any effective communication process, mediation has the potential of producing credit, prestige, satisfaction (Wall, Stark, & Standifer, 2001), self-esteem, and improved relationships (Shulman, 1996) for the skilled mediator. A mediator's purpose and skills should include encouraging parties to develop a relationship that will help in the present and future (Donohue & Kolt, 1992), accepting feedback and constructive criticism without being defensive (Strasser & Randolph,

2004), displaying commitment to serving people, and developing ideas without receiving credit (Kraybill, Evans, & Evans, 2001). However the presence of emotional contagion during mediation could affect each of these areas, resulting in less effective communication and possibly an altered outcome. As Jones and Bodtker (2001) indicate, experiencing strong emotions may increase behavioral demands and affect perceptions, which could lead to hindered performances. Young and Stephens (2005) explain, "intense emotion experiences negatively impact a social actor's ability to think in a cognitively complex way and inhibits the ability to problem-solve" (p. 4).

Donohue and Kolt stated that the key to mediation "is finding a competent mediator" (1992, p. 144). Some may argue that a competent mediator has good language skills, including the ability to not use generalities that may cause attitude changes (Kraybill et al., 2001), is able to clarify and frame issues clearly (Kraybill et al., 2001; Lang & Taylor, 2000; Strasser & Randolph, 2004), interrupts when necessary, and remains silent when appropriate (Strasser & Randolph, 2004). Some other common communication skills taught to and expected of mediators include active and effective listening (Beer & Stief, 1997; Kraybill et al., 2001; Lang & Taylor, 2000; Strasser & Randolph, 2004), empathizing (Beer & Stief, 1997; Kraybill et al., 2001; Strasser & Randolph, 2004), building rapport and trust with disputants (Beer & Stief, 1997; Lang & Taylor, 2000), problem solving, building agreements (Lang & Taylor, 2000), conveying confidence, offering support, being directing, comfortable with high emotion, imaginative, and patient (Beer & Stief, 1997).

The communication process for the mediator starts before the mediation occurs, and may continue past the final settlement. During mediation, mediators are expected to

master and have control of communication skills ranging from active listening to relationship building. Like other processes, mediation moves through stages. The following is a brief description of each mediation stage and the communication skills that are needed from the mediator during that stage.

Mediation Stages

While mediation practioners and researchers would agree that mediation moves through a series of stages, there are several models for labeling these stages. The stages described here are what are commonly identified but they may be referred to with slightly different names or groupings. The first stage of mediation, *preliminary arrangements*, occurs before the disputants arrive at the mediation. During this stage mediators perform such tasks as collecting data about the dispute through observation, secondary sources, and interviews (Moore, 1986), and preparing the physical setting (Leviton & Greenstone, 1997).

In the *opening* stage, mediators welcome and greet participants, seek name clarification, and allow parties to review forms and logistics. Mediators then describe next steps and outline the mediation process (Beer & Stief, 1997; Folberg & Taylor, 1986; Kraybill et al., 2001). This stage sets the tone of the mediation and is the proper time for mediators to establish their presence (Beer & Stief, 1997). During the opening stage mediators should include introductions of the disputants and attorneys as well as set ground rules. It is during this stage that mediators develop rapport and a commitment to the mediation process from the disputants (Beer & Stief, 1997; Folberg & Taylor, 1986; Moore, 1986).

The next stage is *ventilation* or *storytelling,* where the disputants are given the opportunity to tell their stories. The mediator will instruct the disputants on how to exchange information, set a courteous, unhurried tone, explain to the participants that they are expected to listen and speak with respect to each other, select which participant will start, protect that party while they speak, and formally end each participant's speaking turn (Beer & Stief, 1997). While stories are being shared, mediators must also practice effective listening skills (Kraybill et al., 2001; Leviton & Greensone, 1997).

Once disputants have thoroughly explained the conflict, mediators move to the *issue and problem clarification* stage. It is here that mediators restate what has been said by summarizing the issues in their own words (Beer & Stief, 1997; Folberg & Taylor, 1986; Kraybill et al., 2001; Leviton & Greensone, 1997). Furthermore, disputants should then agree on the credibility of each other's information, clarify issues, and find a common understanding (Folberg & Taylor, 1986; Leviton & Greenstone, 1997).

During the *generating options* stage, mediators should provide a process to help disputants find possible solutions to the established conflict (Beer & Stief, 1997). Two specific tasks should be accomplished during this stage: (1) mediators should help participants' articulate options they want, and (2) mediators should help develop new options that may be better than previous ones generated (Folberg & Taylor, 1986).

After generating options, the *bargaining and negotiation* stage begins. Here, mediators should identify the most effective way to meet disputants' needs (Folberg & Taylor, 1986). Mediators should evaluate, refine, and explore the consequences of possible solutions (Beer & Steif, 1997).

The a*greement writing and agreement enforceability* stage takes great patience and self-control on the part of the mediator. Mediators should read the draft of the agreement aloud to the participants, being clear and specific (Kraybill et al., 2001). Mediators should remind the participants of the consequences and risks of the agreement, listen carefully to any additional concerns, write a final copy, and give participants a final copy (Beer & Stief, 1997; Folberg & Taylor, 1986).

After an agreement has been written, *closing statements* should be conducted. It is important for the mediator to acknowledge what the participants have accomplished and compliment their hard work, collect payment, decide if there is a reason to meet again, and write a summary of the mediation (Beer & Stief, 1997).

Caucusing

In the midst of mediation, no matter the stage, mediators may decide it could be helpful to meet with the disputants individually. This individual meeting is often referred to as a caucus. Leviton and Greenstone (1997) suggest that the mediator call for caucus if there is a need (1) for additional information, (2) to affect tension levels, or (3) to change negotiation approaches of either or both sides of the mediation.

While mediators assume a neutral, objective, third party role during these stages, research suggests mediators may experience positive and negative emotions throughout the process. Young and Stephens (2005) examined patterns of positive and negative emotions experienced by mediators. Nineteen mediators at a mid-sized southwestern university were asked to complete an online survey via email that addressed their emotional experiences during mediation. The results of this survey found that negative emotion may spike during the ventilation stage and diminish as the mediation comes to

resolution. On the other hand, positive emotions may be relatively low at the beginning of the mediation and strengthen as an agreement is reached. Young and Stephens' study supports Jones and Bodtker's (2001) call to examine mediators' emotional experience during mediation.

Emotion

Emotion is an event, rather than a thing (Jones, 2005), that involves cognitive, physiological, and behavioral components (Kitayama & Markus, 1994). These three components consist of "conscious awareness; facial, vocal, and postural expression; neurophysiological and autonomic nervous system activity; and gross emotional behaviors" (Hatfield et al., 1992, p. 152). Scherer (1994) would agree that emotions are characterized by a cognitive component, action readiness, feelings, and physiological changes. Planalp (1999) outlines emotion in the following way: (p. 9)

(1) Objects, causes, or eliciting events are the something that emotion is about.

(2) The object is appraised or evaluated, producing the emotional experience in response to the situation, person or event.

(3) The emotional experience produces physiological changes which may be body's way of preparing for the next step – action tendencies.

(4) Action tendencies: the motivation to express the emotion or behave in a certain way.

(5) Regulation: the ability to decide whether or not to engage in the action tendency.

Guerrero, Anderson, and Trost explain, “emotional experience and expression is part of a fabric of thoughts, feelings, and behaviors that blend together to characterize the tapestry of interpersonal interaction” (1998, p. 4).

Explaining emotion as a combination of cognitive, physiological, and behavioral aspects sets it apart from affect, mood, and feelings (Jones, 2005). Jones (2005) noted that, “feelings are sensations that do not necessarily have cognitive components…moods are distinguished from emotions in terms of duration and intensity; with moods being of longer duration and significantly less intensity…affect is the most general of the terms, encompassing the other three” (p. 4).

Because emotion is an event, it is difficult to measure, study, and/or manipulate. Due to this difficulty, scholars have not yet concluded which aspect of emotion (cognitive, physiological, or behavioral) triggers the others and/or which most often appears first. However, Hatfield et al. (1992) summarize an emotional event by explaining that no matter the situation, “the brain integrates the emotional information it receives; thus each of the emotional components acts on and is acted upon by others” (p. 153). This is a powerful process that has the capability of communicators. Lazarus (1991) explains:

> What happens, especially with a strong emotion, is that we who are experiencing it are often taken over by the emotion; our attention becomes riveted on the harm or benefit and what we must do about it; we are caught up in the charged relationship we are having with the environment, the urge to action, the sensations associated with that relationship, and the reaction it provokes. (p. 16)

With this in mind, mediators who experience strong emotions during mediation may be negatively affected thereby reducing their ability to focus on their responsibilities as a mediator. Considering this, the next section explores emotion as it specifically relates to conflict.

Emotion in Conflict

Recent research acknowledges the role emotion plays in conflict. Jones and Bodtker (2001) state that (1) conflict is emotionally defined, (2) conflict involves an ongoing level of emotional intensity, (3) emotion morally frames conflict, (4) emotion reflects identity issues that impact conflict, and (5) emotion impacts relational conflict. For mediation, these ideas are critical when considering such aspects as training, methodology, and overall success. Conflict being emotionally defined means that conflict occurs when there is a perception of incompatible goals or interferences between disputants. Those perceptions elicit emotion. Second, because conflict involves an ongoing level of emotional intensity, the third party neutrality of the mediator could be jeopardized. Third, emotion morally frames conflict, meaning values have an impact on the experience of emotion and emotions reveal hidden values (Manstead, 1991; as summarized by Jones, 2005). Conflict occurs because people perceive something to be "wrong" and have a desire to make it "right" (Jones, 2005). Next, identity issues in emotion impact mediation in that disputants, or mediators, may become more concerned with their identity during mediation than the underlying issues. Last, emotion impacts relational conflict because emotions are influenced by and influence power and social status (Kemper, 1993). During mediation, it is important for the disputants to have equal power. If the mediators are emotionally distracted, power imbalances may occur.

Jones states that in order for mediators to be most effective, they must attend to the expressive, physiological, and cognitive aspects of emotion (Jones, 2000; Jones & Bodtker, 2001; Jones, 2005). By attending to the expressive element of emotion, or "how we communicate to others what we are feeling, or what we want them to think we are feeling," (Jones & Bodtker, 2001, p. 224) mediators must be aware of verbal and nonverbal communication that is intentional and unintentional. The cognitive element of emotion in conflict deals with Lazarus's (1991) identification of two kinds of appraisals, primary and secondary (Jones & Bodtker, 2001).

Primary appraisals occur when we ask ourselves if a stressful event or situation is personally relevant. This may occur in mediation when disputants produce possible solutions and appraise whether or not the solution impacts their own goals. A mediator must be able to recognize if this is occurring and keep disputants on a track of producing the best possible overall solutions, not just the solutions that meet their personal goals and/or identities. As Kraybill et al., (2001) point out, a mediator should clarify the issues and identify common concerns.

Secondary appraisals address additional information such as judgments of accountability, coping potential, and future expectancy. If disputants do not expect a future relationship with each other, they may be more likely to think through their emotions in a different manner than disputants who know their relationship will continue. A mediator must be sensitive to this varying degree of emotion while continuing to help parties retreat without a loss of face, generate alternatives, and keep open channels of communication (Leviton & Greenstone, 1997).

While the expressive and cognitive aspects of emotion in conflict are important for the mediator to recognize, this study primarily addresses physiological aspects, or the "felt" emotion, in mediation. Jones (2005) points out that because conflict is emotionally based, the mediator's job is to inherently uncover emotional triggers of the disputants. Not only do mediators have to uncover these emotions and their triggers, but they are also expected to attend to them.

Mediators are trained to take on the role of process facilitator, discussion facilitator, clarifier, idea generator, face saver, agent of reality, messenger, distinguisher of needs from wants, and trainer (Leviton & Greenstone, 1997). Therefore, any emotion mediators experience has the possibility of interrupting their ability to manage the communication process of mediation effectively. Thompson and Kim (2000) point out how disputants' emotions could have an impact on outside parties, such as mediators, in creating accurate perceptions of the disputants' interests and intentions. Friedman, Anderson, and Brett (2004) point out that expressing anger generates angry responses by other parties involved and therefore, could lower the resolution rate in mediation. In summary, conflict conversations like those held in mediation are framed by emotion. Emotional contagion is an area of emotion that could affect mediators and is discussed in the following section.

Emotional Contagion

According to Hatfield et al. (1992), emotional contagion is "the tendency to automatically mimic and synchronize movements, expressions, postures, and vocalizations with those of another person and, consequently, to converge emotionally" (p. 153-154). Within this definition of emotional contagion, mimicry denotes

communication cues that cause people to automatically and continuously copy the facial expressions, voices, postures, movements, and instrumental behaviors of other people (Hatfield et al., 1993). In a mediation, an angry disputant may express her anger by raising her voice, squinting her eyes, and pressing her lips together. The mediator, because she is attending to these emotional cues, automatically and continuously, begins to mimic the facial expressions, postures, and movements of the angry disputant. Through afferent feedback, defined as the impulses being sent toward the nerve center by way of mimicry, the mediator begins to feel angry. The mediator, then, has "caught" the emotion of the disputant. In fact, Hatfield et al. (1992) define emotional contagion as "the tendency to 'catch' (experience/express) another person's emotions (his or her emotional appraisals, subjective feelings, expressions, patterned physiological processes, action tendencies, and instrumental behaviors)" (p. 153). Howard & Gengler (2001) agree that emotional contagion "refers to someone (hereafter the receiver) catching the emotion being experienced by another (hereafter the sender), wherein the emotion of the receiver converges with that of the sender" (p. 189).

This type of emotional contagion, as defined by Hatfield et al. (1992), is also referred to as primitive emotional contagion (Barsade, 2002). Primitive emotional contagion is the automatic, unconscious transfer of emotions from person to person (Barsade, 2002). As summarized by Barsade (2002), "this primitive contagion occurs through a very fast process of automatic, continuous, synchronous nonverbal mimicry and feedback" (p. 647). Primitive emotional contagion begins when one person quickly and automatically begins mimicking such things as facial expressions and body language of another person (as summarized by Barsade, 2002). Brought on by the mimicking is

afferent feedback, or nerve impulses sent to the brain, that then leave the person feeling a particular emotion (Howard & Gengler, 2001). Facial-feedback theory helps explain the dynamics of afferent feedback (Doherty, 1997). Facial-feedback theory proposes that changes in skeletal musculature provide different patterns of sensory feedback of muscle tension levels to the brain, thereby evoking different emotions. Even though facial, postural, and vocal feedback are not the sole causes of emotion, "the degree that emotions are influenced by these sources of feedback, mimicry should contribute to emotional contagion" (Doherty, 1997, p. 133).

While emotional contagion may appear to resemble empathy, there is a sharp distinction between the two (Hatfield, Cacioppo, & Rapson, 1994; Doherty, 1998). According to Hatfield et al. (1994), empathy is a *cognitive process* where one person transposes herself into thinking and feeling like another person. Emotional contagion is a *primitive process* (Barsade, 2002) that involves the tendency for one person to automatically mimic the expressions of another, and to consequently, emotionally converge. Unlike empathy, emotional contagion does not include a person consciously thinking of a way to relate to or understand what another person is speaking about or feeling. Emotional contagion occurs automatically and unconsciously.

According to several studies (Howard & Gengler, 2001; Hatfield et al., 1992, 1994; Barsade, 2002) emotional contagion is more likely to occur in certain situations. Howard and Gengler (2001) point out that emotional contagion is more likely to occur when the receiver perceives a connection with the sender. Hatfield et al. (1992, 1994) mention that contagion, through mimicry, is more likely to occur when receivers pay close attention to senders or considers themselves similar to senders. In other words, "the

degree to which emotional contagion then occurs is mediated by attentional processes, with greater contagion occurring when more attention is allocated (Barsade, 2002, p. 647; Hatfield et al., 1992, 1994).

Emotional contagion has been studied in a variety of contexts including public speaking (Behnke, Sawyer, & King, 1994), group interactions (Barsade, 2002), and the formation of consumer product attitudes (Howard & Gengler, 2001). The consensus of this research indicates that emotional contagion exists in a variety of environments and has a significant impact on people's behaviors. For example, Behnke et al. (1994) found that participants assigned to give a public speech in an educational setting were more likely to report increased anxiety if the speaker preceding them also reported high levels of anxiety and the audience reported perceiving that same speaker as having high anxiety.

Barsade's (2002) study examined emotional contagion in a group setting where students participated in a negotiation task. During the negotiation, the same confederate displayed cheerful enthusiasm, hostile irritability, serene warmth, or depressed sluggishness. Barsade (2002) found emotional contagion does occur in groups and it changes people's moods in groups inasmuch as they are continuously influencing and being influenced by the moods and judgments of others.

In evaluating the formation of consumer attitudes, Howard and Gengler (2001) asked participants to evaluate pieces of art as part of a marketing feasibility study. Before their evaluations, participants either won a prize as part of the study or were given a prize from a smiling confederate who explained she was giving the prize to the participant as a nice gesture. Evaluations of the art were examined comparing participants who won a prize from those that were given the same prize from a smiling

stranger. Not surprisingly, evaluations from participants who received a gift from a smiling stranger were higher than participants who won a prize but had no exposure to a smiling confederate. Howard and Gengler (2001) found "when people are happy, they smile a lot. When we like them, we mimic their smiling, which also makes us happy" (p. 198). The same study explains that the happy emotion can also have a positive bias on our evaluations of products.

In addition to contextual demands influencing the likelihood of emotional contagion, some people may be more likely to experience emotional contagion than others. For example, Doherty (1997) found a scale measuring emotional contagion reliably correlated with a measure of responsiveness to afferent feedback and self-reports of emotional experience following emotional stimuli. This suggests individual differences in susceptibility to emotional contagion.

Additionally, a study by Doherty (1998) ties emotional contagion to social judgment processes. In addition to supporting emotion contagion theory, Doherty's (1998) methods provide a unique way of observing emotional contagion. Because both the findings and the method provide an important framework for this study, his study will be described in detail below.

Doherty's (1998) Study on Emotional Contagion and Social Judgment

The purpose of Doherty's study was to examine "the influence of another's emotional expressions and individual differences in responsiveness to afferent feedback on attention, evaluations, and memory" (1998, p. 187). As stimuli for mood manipulation, three videotapes were prepared with the same woman sending the emotional message. The woman expressed happiness in one videotape, sadness in

another, and neutrality in the third. The woman in the videotape was able to express happiness and sadness by being hypnotized before the happy and the sad videotapes. The three tapes were identical in all areas except emotion expressed and time (happy = 2:50 minutes; neutral = 3:05 minutes; sad = 3:55 minutes). In order to measure emotional contagion, generated after viewing the tapes, Doherty (1998) gathered ten black and white photographs from the photo journal, *The Family of Man* (Steichen, 1955), that depict positive, negative, and ambiguous emotional expressions for the participants to rate on a scale of extremely negative (-10) to extremely positive (+10) after viewing the videotapes.

Participants came to the laboratory twice with three weeks in between visits. The first time the participants came to the lab, they viewed the neutral stimulus tape and then rated the photographs. Three weeks later, during their second visit, participants were randomly assigned to view either the happy or sad videotape. Afterwards, they rated the same photographs. Doherty (1998) hypothesized that participants would display a bias in their evaluations of the photographs congruent with the mood of the stimulus person in the videotape. In other words, Doherty (1998) believed that participants would rate the photographs more negatively after watching the emotionally charged negative video and more positively after watching the emotionally charged positive video. Doherty (1998) found strong support his hypothesis, primitive emotional contagion, as proposed by Hatfield et al. (1992, 1994),

Doherty's (1998) study is important because it supports emotional contagion as well as provides a creative approach to observing emotional contagion. Although the study defines primitive emotional contagion as catching another's emotions based on

mimicry and afferent feedback, but neither study observes facial mimicry. Instead, evaluations of emotional pictures after being exposed to emotional stimuli provide evidence of the phenomenon. Most research on primitive emotional contagion includes self-reports from participants and coders that rate the facial expressions and movements of the participants. Doherty (1998) points out that this type of self-reporting and rating system is problematic. First, autobiographical accounts that simultaneously present emotional expression and emotional content make it difficult to separate the influence of emotional contagion from that of empathy. Second, although the use of coder's ratings of participants' first-order facial expressions may be useful, second-order facial expressions (those resulting from mimicry) are often barely perceptible and difficult to rate. Furthermore, there has been a lack of data establishing a relationship between the participants' and stimulus persons' expressions so the use of coder's ratings does not adequately address the individual differences in expressiveness. Doherty's (1998) method of observing emotional contagion by exposing participants to emotional stimuli and then having them evaluate ambiguous emotional pictures provides a way to avoid flawed self-reports as well as the involvement of time consuming observation and coding of participants' nonverbal cues.

Emotional contagion theory predicts the automatic and unconscious transferring of emotions from one person to another by way of mimicry and afferent feedback (Hatfield, 1992). Because mediation requires mediators to identify and attend to disputants' emotions, mediators may be susceptible to emotional contagion. While mediators are trained to be neutral, objective third parties, research suggests they may experience strong emotions during the mediation process (Young & Stephens, 2005).

These emotions may have a debilitating effect on the mediation process, as strong emotion is likely to affect cognitive and behavioral functioning (Jones & Bodtker, 2001). One source of this emotion may be the automatic mimicking of disputants' emotions. Research has shown that environments in which communicators are attuned to another's emotional cues may be more likely to stimulate emotional contagion. Because mediators are trained to orient themselves to disputants' emotional states, they may be susceptible to "catching" disputants' emotions. Indeed, previous research has found emotional contagion to occur in other communication contexts. Considering the success of mediation largely rests on a mediators' ability to facilitate the process, emotional contagion may negatively impact mediation success.

As Jones and Bodtker (2001) point out, emotional contagion could have notable implications on mediators and the mediation process. Mediators who work with an angry disputant may find themselves feeling angry when disputants displayed strong emotions (Jones & Bodtker, 2001). This same process has the possibility of happening to mediators who may be automatically and unconsciously mimicking disputants displaying other emotions such as sadness, frustration, or fear. Jones and Bodtker (2001) explain that by understanding the emotions they are susceptible to, mediators can remain calmer and focused on the mediation.

By adapting methods from Doherty's (1998) study, which examined emotional contagion and social judgment, this study will take up Jones and Bodtker's (2001) call to examine mediators' emotional experience by determining if mediators are susceptible to emotional contagion.

Hypotheses

Based on the reviewed research in mediation and emotional contagion, it is expected that participants will exhibit a bias in their evaluation congruent with the emotion of the stimulus video and that participants who are more susceptible to emotional contagion will evaluate photographs more negatively after watching the negative video than participants who are not as susceptible. Specifically, the following hypotheses were advanced:

H1: Participants will evaluate photographs more negatively after watching an emotionally charged negative video than after watching a neutral video with similar content.

H2: An inverse correlation will exist between emotional contagion scores and photograph evaluations after watching the emotionally charged negative video.

Method

Participants

Participants were recruited from three mediator populations. The first group of participants were undergraduate students enrolled in a mid-sized university mediation course (n=20) whose ages ranged from 18 to 28 (M = 21.5, SD = 2.2). The undergraduate students enrolled in the mediation course completed the study as part of their regular classroom activity. The second group of participants were trained mediators from a local mediation association (n=16) whose ages ranged from 28 to 81 (M = 56, SD = 12.6). The mediators in the local mediation association completed the study as part of their monthly meeting program. The third group of participants was comprised of faculty and staff who served as volunteer mediators for on-campus disputes (n=15) whose ages ranged from 24

to 63 (*M* = 50.5, *SD* = 9.9). This group of mediators also completed the study as part of their monthly meeting program. Informed consent was given by each participant prior to the study. All participation was voluntary and participants were not penalized for not participating.

Materials and Instrumentation

Emotional contagion scale.

After filling out the informed consent and basic demographic questions, each participant completed an adaptation of The Emotional Contagion Scale (Doherty, 1997; see Appendix A). This 14 item Likert-style questionnaire measures individual susceptibility to emotional contagion. All 14 items asked participants to agree or disagree on a four point rating scale (1 = Never; 4 = Always) to questions including: "If someone I'm talking with begins to cry, I get teary-eyed," "It irritates me to be around angry people," and "Being around happy people fills my mind with happy thoughts." The scores of all 14 items were summed so results could range from 14 (the least susceptible to emotional contagion) to 56 (the most susceptible to emotional contagion). In this study, the Emotional Contagion Scale (Doherty, 1997) yielded an alpha reliability of .86.

Videotapes.

In order to provide stimulus for emotional contagion, two four-minute videotapes were developed with two females (identified as Jennifer and Cristina) acting as disputants in a mediation. The actors portrayed the ventilation stage of mediation involving a dispute concerning group work and grades. This stage was selected because mediators in a study by Young and Stephens (2005) indicated this phase as being most likely to evoke

negative emotions. One of the videotapes showed the actors expressing negative (anger) emotion and the other videotape showed the actors expressing a more neutral position. The actors were trained together on how to express anger. According to Burgoon, Buller, & Woodall (1996), people express anger by using loud and fast speech, a higher pitch, smiling with contempt (tightened lip corners), narrowing their eyes (eyelids and eyebrows), and narrowing their lips. For the neutral video, participants were told to remain as neutral (displaying a minimal amount of emotion) as possible in their expressions, movements, and verbal tones. While differing in affect, the videotapes were identical in physical location, lighting, and key message content.

Manipulation check.

For the purpose of validation of the treatment condition, the tapes were viewed by 69 students (36 viewed the neutral and 33 viewed the angry), unaware of the purpose of the study. The participants were undergraduate students enrolled in a mid-sized university basic communication course. Informed consent was given by each participant prior to the manipulation check. All participation was voluntary and participants were not penalized for not participating. Using an adaptation of the Borg Emotion Scale (1982; see Appendix B), participants answered the questions regarding the emotional states of the disputants. Four primary emotions (anger, joy, sadness, and fear) were queried. Response options for the Borg Emotion Scale (1982) ranged from *none at all* to *extremely* on a twelve-point semantic differential scale (1 = None at all, 12 = Extremely). Students' scores were determined by combining ratings of each emotion (anger, joy, sadness, fear) for the two actors. Totals ranged from 0 (no display of the specified

emotion) to 22 (the highest display of the specified emotion) to create a total score for each emotion.

Independent samples t-tests compared total scores for each emotion. Participants who viewed the angry video rated disputants as more angry than participants who watched the neutral video (M = 16.9, SD = 2.2; M = 13.6, SD = 1.9). This finding indicated the tapes were displaying the desired affect, t (69) = -6.6, p = .00. To confirm that anger was the dominant emotion being displayed, t-tests compared the results of the joy, sadness, and fear scores. In regard to the emotion of joy, no significant differences were found between students who viewed the angry video (M = 1.7, SD = 2.8) and students who viewed the neutral video (M = 2.3, SD = 2.7), t (69) = .82, p = *ns*. In regard to the emotion of sadness, students who viewed the angry video (M = 8.9, SD = 2.9) indicated more sadness than students who viewed the neutral video, (M = 7.3, SD = 3.8), t (69) = 2.1, p = .04. In regard to the emotion of fear, no significant differences were found between students who viewed the angry video (M = 7.9, SD = 4.5) and students who viewed the neutral video (M = 7.8, SD = 3.7), t (69) = -.16, p = *ns.*

Photographs.

Replicating Doherty's (1998) measurement of emotional contagion, 11 photographs from the cross-cultural photo journal, *The Family of Man 2* (see Appendix C), were selected. These black and white photos show culturally diverse men and women expressing negative, positive, or ambiguous emotions. Participants rated the pictures in response to the question: "How positive or negative is the emotional expression depicted in the picture?" The photographs were presented as a stapled handout with one picture

per page (8 ½" X 11"). Below each picture was a twenty point Likert scale, with anchors labeled -10 = extremely negative, +10 = extremely positive.

Procedure

After completing the informed consent materials and the Emotional Contagion Scale (Doherty, 1997), participants received the packet of photographs. Participants were then told that they would view a short videotape of the ventilation stage of a mediation already in progress. The participants were asked to watch the video carefully and then evaluate the photographs in the packet. In order to balance any order effects, the undergraduate students and the mediators from the local university viewed the angry videotape first. The local mediation association group viewed the neutral videotape first. The undergraduate students then conducted their two-hour long class before viewing the neutral videotape and rating the second packet of photographs. The local mediation association group and the local university mediator group conducted their two-hour long meetings before viewing either the angry or neutral vide and rating the photographs. Participants were debriefed on the purpose of the study after all data was collected.

Results

Because participants were from three groups, two independent samples t-tests were conducted comparing the summed angry and neutral photograph ratings of each group in order to find out if the data from (a) mediation students, (b) practicing county mediators, and (c) practicing university mediators from a local university could be combined and analyzed as a single group. Results indicated that the two groups of practicing mediators could be combined and analyzed as one group for both video conditions: angry video, t (27) = .36, $p < ns$, neutral video, t (25) = .45, $p < ns$. The

combined mediator group and the student group photo ratings were statistically different in the neutral video condition, t (44) = -2.88, $p < .00$. Photo ratings for the combined mediator and student groups were not statistically different in the angry video condition, however, t (46) = -1.37, $p < ns$. Because the neutral photo ratings between the mediator and student group were statistically significant, a conservative approach decision was made in order to prevent any type one errors from occurring. Therefore, the practicing mediator and mediation student groups were analyzed separately.

The first hypothesis stated that participants would evaluate photos more negatively after viewing the negative stimulus tape than after viewing the neutral tape. Results of the practicing mediator group were analyzed first. A paired samples t-test was conducted to determine if mediators' ratings of the photographs were more negative after viewing the negative stimulus tape (M = 16.9, SD = 12.5) than after viewing the neutral stimulus tape (M = 21.6, SD = 12.9). A significant difference was found between these evaluations, t (25) = -2.0, $p < .05$. Next, the student ratings were analyzed. Results of a paired samples t-test found no significant differences in student mediator photo ratings between the videotape conditions, t (20) = -.2, $p <$ ns. Therefore, the first hypothesis was supported for the group of trained mediators but not the mediation students.

The second hypothesis predicted that there would be an inverse correlation between participants' Emotional Contagion Scale (Doherty, 1997) scores and their photograph ratings after viewing the negative stimulus tape. In other words, the more susceptible the participants were to emotional contagion, the more negative their photograph ratings would be after viewing the negative stimulus tape. Again, the practicing mediator scores were analyzed first. A Pearson's r was obtained to examine

the correlations between mediators' emotional contagion scores and their photo ratings after viewing the negative stimulus tape. No significant correlation was found between emotional contagion scores and negative photo ratings of mediators, r (28) = -.04, p < ns. The mediation students' scores were then analyzed. A Pearson's r was obtained for students' emotional contagion scores and ratings of photos after viewing the negative stimulus tape. Again, no significant correlation was found between emotional contagion scores and negative photo ratings, r (20) = -.18, p < ns

Because the predicted correlation between emotional contagion scores and photo ratings was not found, a post hoc analysis was conducted. Change scores were calculated for each participant's photo ratings after viewing the negative and neutral videos. These change scores may be more likely to correlate to susceptibility to emotional contagion than the participants' photo ratings after viewing the negative video. For example, a participant who was more positive in general may have a lower photo rating score because of their disposition than a participant who was more likely to rate photos more negatively in general. An interesting difference is how much the ratings changed between the neutral and negative video stimulus. A Pearson's r was obtained for photo rating change scores and emotional contagion scores of both the practicing mediators and the mediation students. A significant correlation emerged between practicing mediators' Emotional Contagion Scale (Doherty, 1997) scores and their photo rating change scores, r (25) = -.5 p < .01. No significant correlation was found between the change scores and Emotional Contagion Scale (Doherty, 1997) scores of students, r (20) = -.22, p < *ns*. These results indicate mediators with a high Emotional Contagion Scale (Doherty, 1997)

scores may be more likely to experience emotional contagion during mediation than those with low Emotional Contagion Scale (Doherty, 1997) scores.

Discussion

The purpose of this study was to examine if mediators are susceptible to emotional contagion. Emotional contagion theory proposes that people automatically and unconsciously "catch" the emotions of others by way of facial mimicry and afferent feedback (Hatfield et al., 1992, 1993, 1994). Research in emotional contagion suggests contexts in which communicators are attuned to emotional cues of others may increase emotional contagion. Because mediators are trained to attend to emotional cues and are involved in an emotion-based conflict conversation, it stands to reason that mediators may be susceptible to emotional contagion. Research by Young and Stephens (2005) found that mediators report experiencing strong emotions during mediation sessions. Since mediators are trained to be neutral third parties during mediation, the existence of emotional contagion within mediation could pose several risks to the disputants, mediators, and ultimately the outcome.

Based on the results of this experiment, it was found that emotional contagion has the potential of impacting mediators during mediation. The first hypothesis stated that participants would evaluate photographs more negatively after watching an emotionally charged negative video than after watching a neutral video with similar content. Hypothesis one was confirmed in the mediator group. This means that mediators evaluated photographs significantly more negatively after viewing the angry videotape than they did after viewing the neutral videotape. The existence of emotional contagion in mediation (within the mediator group) is essential for the mediation

community to acknowledge and address. While mediators are trained to be neutral third parties without a stake in the outcome, this study suggests that they are susceptible to emotional contagion. A mediator who feels angry after disputants display their anger may become distracted, lose their objectivity, or otherwise compromise their role as a neutral facilitator of the conflict conversation, thus affecting the mediation process, and ultimately its success. Depending on the type of emotion being "caught," mediators' ability to use clear communication could be at risk.

Hypothesis one was not confirmed, however, in the student group. This means that students' evaluations of photos after viewing the negative stimulus tape were not statistically different from their evaluations of photos after viewing the neutral tape. Therefore, it appears emotional contagion did not affect the students, who were inexperienced and still learning the mediation process. There are several factors that could have influenced the two groups to react differently in this study. The mediators had more training and experience on intently listening to the concerns and opinions of disputants in mediation; therefore, they may have been more likely to understand their role as mediators for this study. The student group was still learning the mediation process and had no experience in mediation so the videotapes became one of their initial exposures to a mediation in progress. Because of this, it makes sense that experienced mediators would be more likely to experience emotional contagion. For the purpose of this study, experienced mediators' susceptibility to emotional contagion is a more critical finding than that of the students. Because the findings of this study will be most beneficial to trained mediators, it is especially important that the mediator group's findings are recognized.

Hypothesis two stated that an inverse correlation would exist between scores on the Emotional Contagion Scale (Doherty, 1997) and photograph evaluations after watching the emotionally charged negative video. This hypothesis was not supported for either the mediator group or the student group. While this was a surprise, a few methodological reasons exist for the lack of finding. First, practiced mediators may have completed the Emotional Contagion Scale (Doherty, 1997) under the assumption that answers should be in compliance with what experienced mediators have been trained to think. In fact, upon completion of the study, one mediator confirmed that she thought she was supposed to be answering the questions on the Emotional Contagion Scale (Doherty, 1997) as she had been trained to think as a mediator, not as she would have as an individual. Students may also have been affected by the disconnect between how they "should" fill out the scale and how they would really fill it out. Because students filled out the scale as part of a class activity, they may have felt some pressure to answer it the way mediators should, in a neutral way. It is also possible that students experienced the experimental conditions differently due to the lack of real mediation experience.

Because of the lack of support for hypothesis two was surprising, a post hoc analysis was conducted using change scores (neutral photo ratings minus negative photo ratings) and Emotional Contagion Scale (Doherty, 1997) scores of the participants. This analysis revealed a statistically significant correlation between those change scores and the emotional contagion scores of the mediators. This means that within the mediator group, the higher their emotional contagion scores, the more their photo evaluations differed between the negative ratings and the neutral ratings. This finding is important to this study because it shows that the emotional contagion scores of trained mediators may

be a good indicator of how much they are impacted by emotion during mediation. The higher the emotional contagion scores of the mediators, the more they may be influenced by the emotions of the disputants during mediation.

The first surprising finding is that emotional contagion did not exist within the student group. As previously mentioned Hatfield et al. (1992, 1994) state contagion, through mimicry, is more likely to occur when receivers pay close attention to senders or considers themselves similar to senders. Two factors may have affected students' ability to attend to the senders. First, during exposure to the experimental stimulus, it was difficult to keep their attention primarily on the videos and secondly, their lack of experience may have led them to feel less similar or connected with the persons in the videos. According to Hatfield et al. (1992, 1994), both of these aspects could have hindered emotional contagion from occurring. Perhaps as these students gain experience in mediation and come to develop more skills, their response to the stimulus will be more like the experienced mediator group. Still, it is interesting to note that the lack of practice and skill may have actually protected these students from experiencing emotional contagion.

Second, it was surprising that emotional contagion scores did not inversely correlate with photo ratings after exposure to the negative video for the mediator group. Because the study took place during a monthly mediation meeting and the Emotional Contagion Scale (Doherty, 1997) asks questions regarding emotional reactions, the environment could have played a role in mediators' frame of mind and ultimately, their answers. Had the mediators been asked to complete the Emotional Contagion Scale (Doherty, 1997) in a different location, at a separate time from the rest of the study, and

on an individual basis, perhaps scores would have more accurately predicted photo evaluations after watching the negative video.

A final result that warrants discussion is that of the post hoc analysis on the mediator group. Even though an inverse correlation was not found between emotional contagion scores and photo evaluations after viewing the negative video, a significant correlation was found between mediators' emotional contagion scores and photo evaluation change scores. This finding adds some valuable meaning to the Emotional Contagion Scale (Doherty, 1997) for mediators. Even though mediators may have completed the Emotional Contagion Scale (Doherty, 1997) under the assumption that they were to complete it from a mediator's point of view, it still predicted which mediators would be more affected by the emotional stimuli. Mediators with higher emotional contagion scores varied more from their neutral photo evaluations to their negative photo evaluations than those mediators with lower emotional contagion scores. This finding is important for the mediation field and can be used to help mediators identify their susceptibility to be affected by emotionally charged situations.

Emotional contagion theory states that communicators may automatically and unconsciously converge emotionally through mimicry and afferent feedback. The overall findings of this study have extended emotional contagion theory to the context of mediation. It was found that emotional contagion can occur in a mediation context and can impact people who have been trained on how to attend to the emotions of others and themselves. Within the field of mediation, training and expectations of mediators should be re-examined due to the findings of this study. This study suggests that the current training mediators go through will not prevent them from "catching" the emotions of

disputants. Furthermore, expectations put on mediators should be refined based on this study. Mediators' awareness of emotional contagion and the direct impact it could have on them should become a focus of mediation training due to the importance of their ability to act in a neutral manner.

Limitations

While one of the strengths of this study was the participation of experienced mediators, it also served as a limitation. Recruiting experienced mediators was a challenge due to accessibility and timing. The only way to access the mediators as a group was during their monthly business meetings. The monthly meetings were lunch or dinner meetings and, because of the environment, made it challenging to express the importance and details of the study to the participants. For example, some participants were distracted with eating and visiting during the introduction to the study. This made it difficult to explain their part in the study with the entire group's attention.

While this study implanted Doherty's (1998) methodological structure to measure emotional contagion, it did not provide an exact replication. This proved to add some limitations. For example, Doherty's (1998) method had participants successfully view the stimulus tapes individually. The current study was not able to show the videos to participants individually. Participants in the Doherty (1998) study may have been more likely to pay closer attention to the videos, becoming more emotionally involved. Additionally, Doherty (1998) had three weeks of elapsed time between participants viewing the two videos; the current study separated the viewing of the two videos only by a couple of hours. This was a practical limitation due to the fact that access to the trained mediators was available only during their monthly roundtable meetings. If participants

were given more time between viewing the neutral and angry videos, they may have been less likely to remember what they saw in the first video and in the photographs, therefore having a clean slate emotionally.

Future Research and Concluding Comments

While a limitation was the accessibility to trained, experienced mediators, having them as participants was a main strength of this study. Many studies do not have the opportunity to include mediators who have had real mediation experience as participants. The trained mediators gave this study an external validity that is often lacking in academic research. Because the sample included trained, experienced mediators, the findings of this study demonstrate that even with, and perhaps because of, their training and experience, mediators can still be susceptible to the emotions of the disputants. Considering that mediation training spends time focusing on how mediators can avoid getting emotional involved, this study questions that training and its effectiveness.

Researchers interested in the emotional experience of mediators will be interested in this study's main findings, that mediators are susceptible to emotional contagion. Because the outcome of mediation depends on how well the mediators maintain control and focus, mediators experiencing emotional contagion could have an effect on the overall outcome of the mediation. Mediator skills such as maintaining control, focus, neutrality, facilitation, and organization can become challenging for a mediator experiencing the same emotions as the disputants. As Young and Stephens (2005) suggest, this becomes even more challenging when the mediator is experiencing negative emotions of the disputants.

Future research could begin by finding ways to involve a larger selection of mediators with experience as participants. This study demonstrates the importance of having experienced, trained mediators as participants in mediation research because mediators have been trained to think and feel differently about conflict than, for example, undergraduate students. It would also be beneficial for future research to recreate the underlying ideas of this study, but show the videos in a manner more similar to Doherty's (1998) study, where each participant views the videos on an individual basis and has a longer lapse of time between each video. Because mediators may have a difficult time taking off their mediator hat and responding to scales as individuals, future research would be enhanced by clarifying that mediators should be answering the questions based on their individual feelings, not what they have been trained to think as a mediator.

In conclusion, this study focused on finding the existence of emotional contagion in mediation and the predictability of mediators' susceptibility to emotional contagion. It was found that the emotion of anger, specifically, was passed from disputants to trained and experienced mediators. It was also found that the Emotional Contagion Scale (Doherty, 1997) predicted mediators' susceptibility to be affected by disputants' emotions. The findings of this study build on emotional contagion theory and should be building blocks for future research regarding emotion and mediation.

References

Barsade, S. G. (2002). The ripple effects: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly, 47,* 644-675.

Beer, J. E., & Stief, E. (1997). The Mediator's Handbook. Gabriola Island, BC: New Society Publishers.

Behnke, R. R., Sawyer, C. R., & King, P. E. (1994). Contagion theory and the communication of public speaking state anxiety. *Communication Education, 43,* 246-251.

Borg, G. (1982). A category scale with ratio properties for intermodal and interindividual comparisons. In H. G. Geissler & P. Petzold (Eds.), *Psychophysical judgment and the process of perception,* (pp. 25-34). Amsterdam: North-Holland Publishing Co.

Burgoon, J. K., Buller, D. B., & Woodall, W. G. (1996). *Nonverbal communication: The unspoken dialogue.* New York: The McGraw-Hill Companies, Inc.

Doherty, R. W. (1997). The emotional contagion scale: A measure of individual differences. *Journal of Nonverbal Behavior, 21,* 131-154.

Doherty, R. W. (1998). Emotional contagion and social judgment. *Motivation and Emotion, 22,* 187-209.

Donohue, W. A., & Kolt, R. (1992). Managing Interpersonal Conflict. Newbury Park, CA: Sage.

Folberg, J., & Taylor, A. (1986). Mediation: A Comprehensive Guide to Resolving Conflicts Without Litigation. San Francisco: Jossey-Bass.

Friedman, R., Anderson, C., & Brett, J. (2004). The positive and negative effects of anger on dispute resolution: Evidence from electronically mediated disputes. *Journal of Applied Psychology, 89,* 369-376.

Guerrero, L. K., Andersen, P. A., & Trost, M. R. (1998). Communication and emotion: Basic concepts and approaches. In P. A. Andersen, and L. K. Guerrero (Eds.), *Handbook of Communication and Emotion* (pp. 3-27). San Diego: Academic Press.

Hatfield, E., Cacioppo, J. T., Rapson, R. L. (1992). Primitive emotional contagion. In M. S. Clark (Ed.), *Emotion and social behavior (*pp. 152-154). Newberry Park: Sage.

Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional contagion. *American Psychological Society, 2,* 96-99.

Hatfield, E., Cacioppo, J. T., and Rapson, R. L. (1994). *Emotional contagion.* Paris:

Howard, D. J., & Gengler, C. (2001). Emotional contagion effects on product attitudes. *Journal of Consumer Research, 28,* 189-201.

Jones, T. S. (2000). Emotional communication in conflict: essence and impact. In Eadie, W. & Nelson, P. (Eds.), *The Language of Conflict and Resolution.* Sage, Thousand Oaks, p. 81-104.

Jones, T.S., & Bodtker, A. (2001). Mediating with heart in mind. *Negotiation Journal, 17,* 217-244.

Jones, Tricia S. (2005). Emotion in mediation: Implications, applications, opportunities and challenges. In M. Herrman (Ed.), *The Handbook of Mediation: Theory, Research and Practice*. New York: Blackwell.

Kemper, T. D. (1993). Sociological models in the explanation of emotion. In *Handbook of emotions,* edited by M. Lewis and J. M. Haviland. New York: Guilford Press.

Kitayama, S., & Markus, H. R. (eds.) (1994). *Emotion and Culture: Empirical Studies of Mutual Influence.* American Psychological Association, Washington.

Kraybill, R. S., Evans, R. A., & Evans, A. F. (2001). Peace Skills: Manual for Community Mediators. San Francisco: Jossey-Bass.

Lang, M. D., & Taylor, A. (2000). The Making of a Mediator: Developing Artistry in Practice. San Francisco: Jossey-Bass.

Lazarus, R. S. (1991). *Emotion and Adaptation.* New York: Oxford University Press.

Leviton, S. C., & Greenstone, J. L. (1997). Elements of Mediation. Pacific Grove, CA: Brooks/Cole Publishing Company.

Manstead, A. S. (1991). Emotion in social life. *Cognition & emotion, 5,* 353-362.

Moore, C. W. (1986). The Mediation Process: Practical Strategies for Resolving Conflict. San Francisco: Jossey-Bass Publishers.

Planalp, S. (1999). *Communicating emotion: Social, moral and cultural processes.* Paris: Cambridge University Press.

Putman, L. L., & Wilson, C. E. (1982). Communicative strategies in organizational conflicts: Reliability and validity of a measurement scale. In M. Burgoon (Ed.) *Communication Yearbook, 6,* (pp. 629-652). Beverly Hills: Sage.

Retzinger, S., & Scheff, T. (2000). Emotion, alienation and narratives: Resolving intractable conflict. *Mediation Quarterly, 18,* 71-85.

Scherer, K. R. (1994). Affect bursts. In S. H. M. Van Goozen, N. E. Van de Poll, & J. A. Sergeant (Eds.), *Emotions: Essays on emotion theory* (pp. 161-193). Hillsdale, NJ: Erlbaum.

Shapiro, D. L. (2002). Negotiating emotions. *Conflict Resolution Quarterly, 20,* 67-82.

Shulman, H. A. (1996). Using developmental principals in violence prevention. *Elementary School Guidance and Counseling, 30,* 170-179.

Steichen, E. (1955). *The family of man.* New York: The Museum of Modern Art.

Strasser, F., & Randolph, P. (2004). Mediation: A Psychological Insight into Conflict Resolution. New York: Continuum.

The Family of Man 2 – LUG Millennium Project (2005). Retrieved November 19, 2006, from http://stmaarten.globat.com/~afirkin.com/NewSite/FOM2%20Folder/fom2.htm

Thompson, L., & Kim, P. H. (2000). How the quality of third parties' settlement solutions is affected by the relationship between negotiators. *Journal of Experimental Social Psychology, 6,* 3-14.

Verbeke, W. (1997). Individual differences in emotional contagion of salespersons: Its effect on performing and burnout. *Psychology and Marketing, 14,* 617-636.

Wall, J. A., Stark, J. B., & Standifer, R. L. (2001). Mediation: A current review and theory development. *Journal of Conflict Management, 45,* 370-391.

Young, M.J., & Stephens, G. K. (2005, November). *Examining Patterns of Mediator Emotion*. Paper presented at the annual meeting of the National Communication, Boston, MA.

Appendix A

Emotional Contagion Scale (Doherty, 1997)

Please circle <u>one number</u> to indicate your response to each of the items listed below.

	Never	Rarely	Often	Always
If someone I'm talking with begins to cry, I get teary-eyed.	1	2	3	4
Being with a happy person picks me up when I'm feeling down.	1	2	3	4
When someone smiles warmly at me, I smile back and feel warm inside.	1	2	3	4
I get filled with sorrow when people talk about the death of their loved ones.	1	2	3	4
I clench my jaws and my shoulders get tight when I see the angry faces on the news.	1	2	3	4
When I look into the eyes of the one I love, my mind is filled with thoughts of romance.	1	2	3	4
It irritates me to be around angry people.	1	2	3	4
Watching the fearful faces of victims on the news makes me try to imagine how they might be feeling.	1	2	3	4
I melt when the one I love holds me close.	1	2	3	4
I tense when overhearing and angry quarrel.	1	2	3	4
Being around happy people fills my mind with happy thoughts.	1	2	3	4
I sense my body responding when the one I love touches me.	1	2	3	4
I notice myself getting tense when I'm around people who are stressed out.	1	2	3	4
I cry at sad movies.	1	2	3	4

Appendix B

Adaptation of the Borg Emotion Scale (1982)

Please circle <u>one number</u> to indicate your response to each of the items listed below.

1. How much anger was Jennifer feeling?

None at all 1 2 3 4 5 6 7 8 9 10 11 12 Extremely

2. How much anger was Cristina feeling?

None at all 1 2 3 4 5 6 7 8 9 10 11 12 Extremely

3. How much joy was Jennifer feeling?

None at all 1 2 3 4 5 6 7 8 9 10 11 12 Extremely

4. How much joy was Cristina feeling?

None at all 1 2 3 4 5 6 7 8 9 10 11 12 Extremely

5. How much sadness was Jennifer feeling?

None at all 1 2 3 4 5 6 7 8 9 10 11 12 Extremely

6. How much sadness was Cristina feeling?

None at all 1 2 3 4 5 6 7 8 9 10 11 12 Extremely

7. How much fear was Jennifer feeling?

None at all 1 2 3 4 5 6 7 8 9 10 11 12 Extremely

8. How much fear was Cristina feeling?

None at all 1 2 3 4 5 6 7 8 9 10 11 12 Extremely

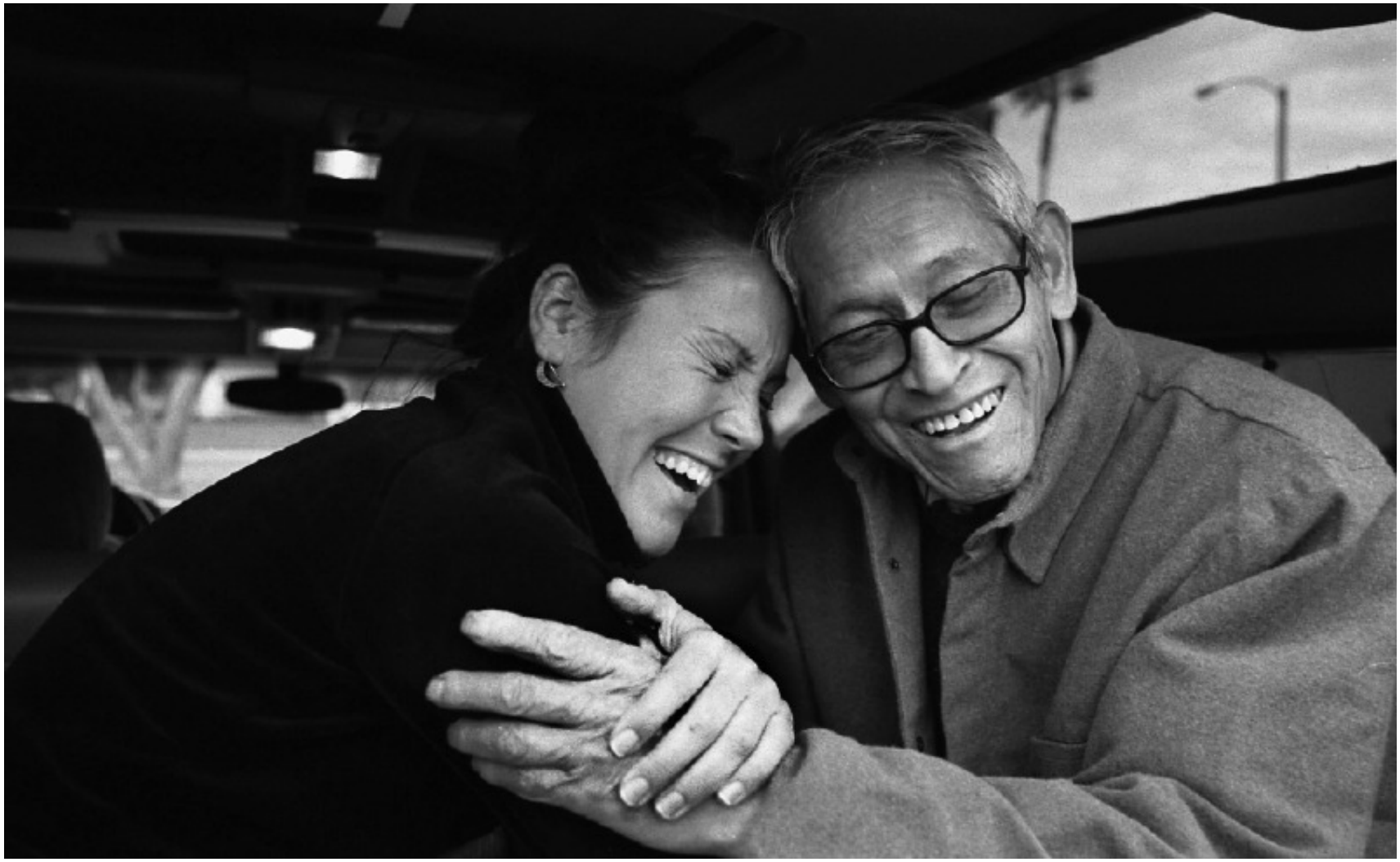
Appendix C

A. Indicate your sex (circle one): M F
B. Write in your age: _____
C. Please write a unique ID that can be used to match your scales and responses (these will not be used in the study): _____

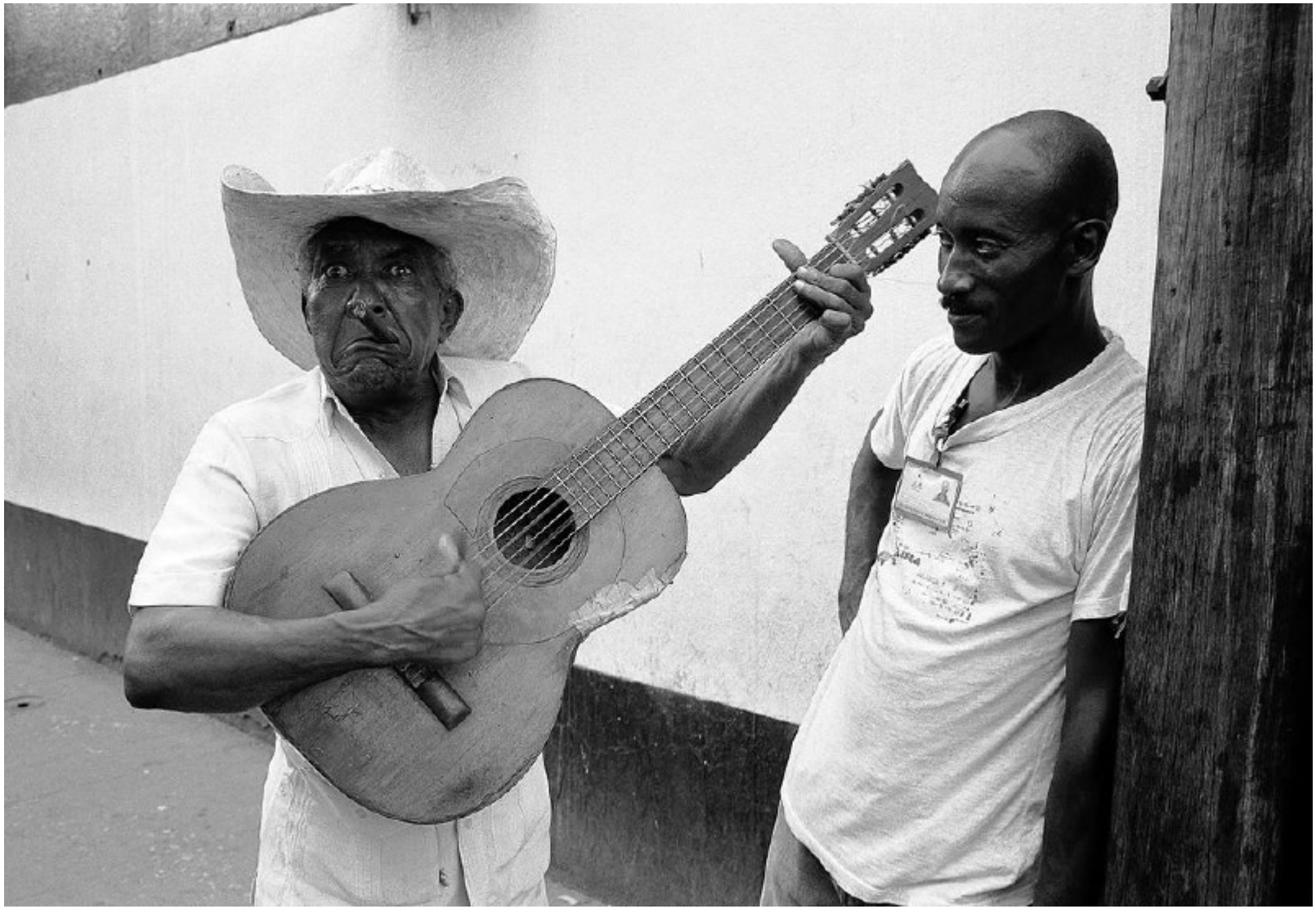
Please rate the following photographs by circling one number below each photograph.

extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive

extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive



extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive



extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive

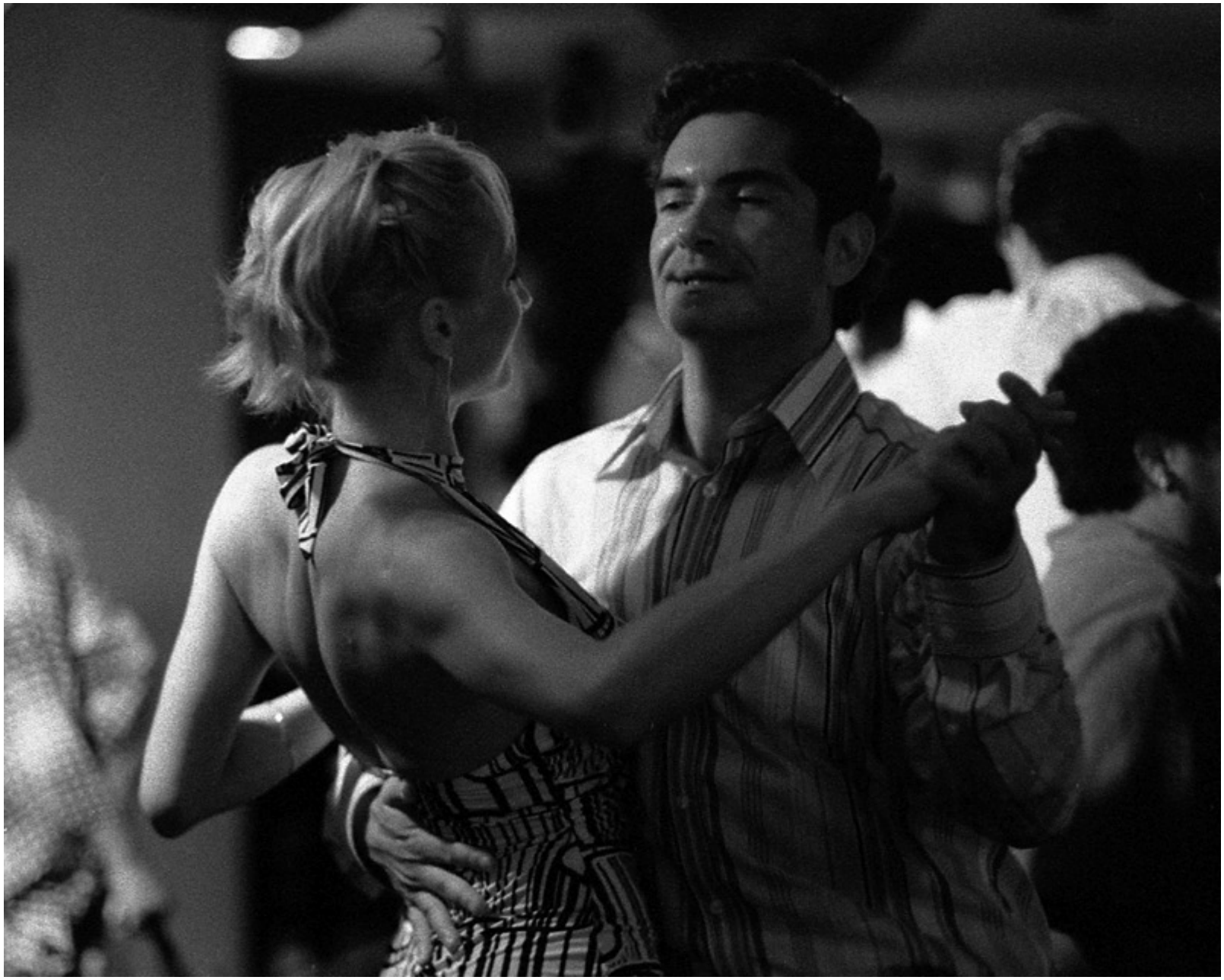
extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive

extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive

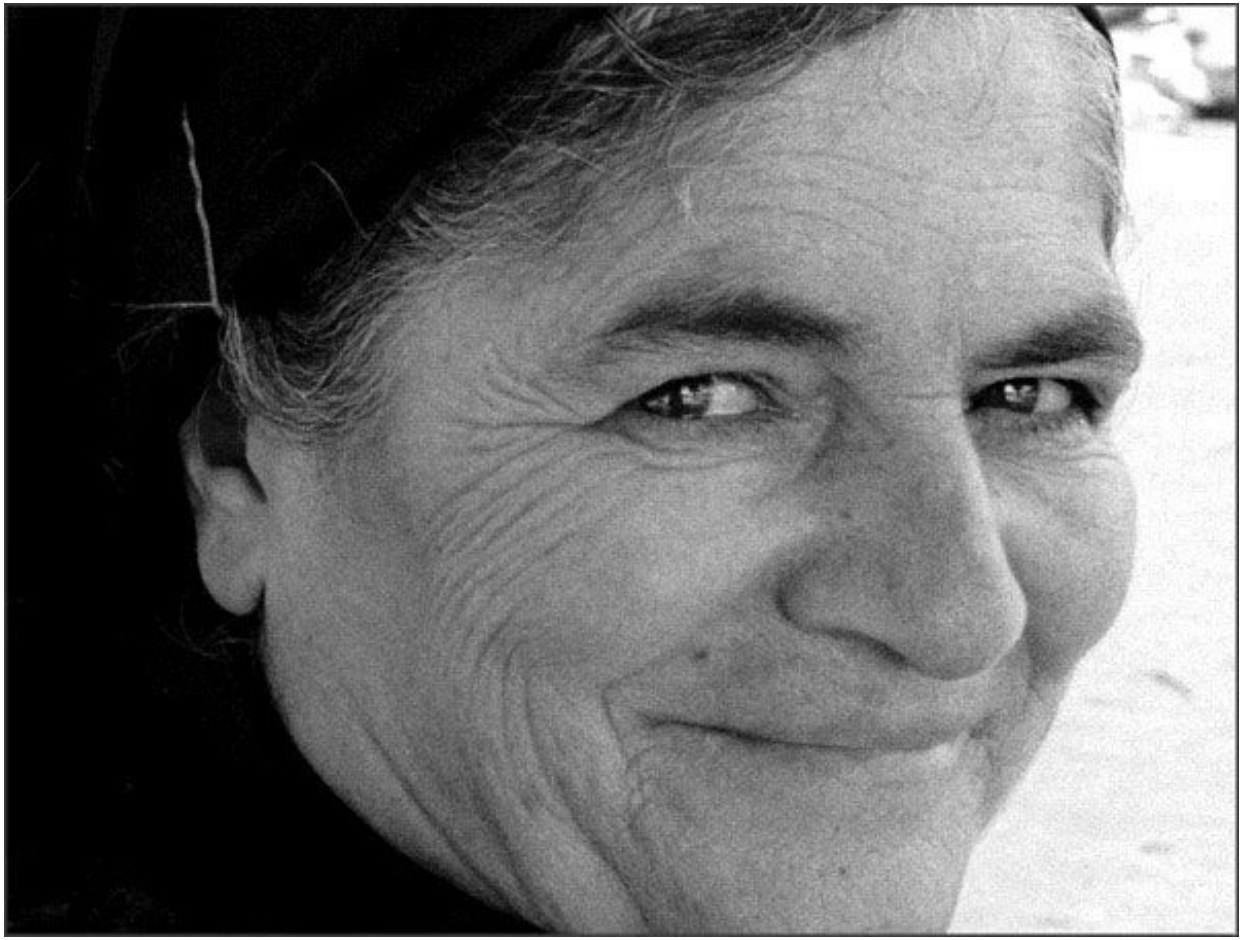
extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive

extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive

extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive



extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive



extremely negative -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 extremely positive