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Perception and Communication of Nonverbal Emotion: In Close Relationships

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Abstract

This paper addresses the perception and communication of nonverbal emotion in close relationships. It reviews research in the area as well as includes case studies that demonstrate different aspects of the research. Specifically it examines emotional recognition and perception, empathic accuracy, accuracy and bias in the perception of emotion, the influence of personality and emotional intelligence, as well as communication of emotion in close relationships. Depending on the situation all of these aspects affect communication differently and the paper explores the ways and situations in which these differences occur. Subsequently it addresses the influence of blindness, deafness, and modern day technology on the perception of emotion and ends with an application section focusing on how this research may affect our everyday lives. This part of the paper is an attempt to apply the information to situations that may affect empathic accuracy and biases in perception. Overall the paper attempts to examine what influences emotional perception and communication in different situations and apply the information to everyday experiences.

Perception and Communication of Nonverbal Emotion:

In Close Relationships

Even in the first minute of a conversation those either involved in the exchange or merely observing it can pick up on information about the participants from the way they communicate. The cues that people use to interpret interactions in everyday conversations will be addressed in greater depth. Humans use all kinds of emotional perception cues to judge others and "read their minds." "Mind-reading is one of several generic terms used to describe a set of social cognitive abilities which enable one person to conceptualize other people's inner worlds and to reflect on their thoughts and feelings" (Dyck et al., 2004). Are these judgments accurate? Can emotional expression tell us more about someone we know well or are we equally as good at judging strangers? What biases are we subject to and when are we accurate? These are questions that are important to understanding the perception of emotion and how this process influences our everyday lives when forming and maintaining close relationships, something that we require because of the social nature of our kind.

The current paper will examine how the perception of emotion affects individuals and their close relationships. It will begin by summarizing background information on face recognition, and addressing how individuals recognize faces and perceive facial emotions. Following this the paper will touch on emotional recognition and perception, empathic accuracy, accuracy and bias in the perception of emotion, the influence of personality and emotional intelligence, as well as communication of emotion in close relationships. As explained by Clark et al.

"expressions of emotion lie at the very heart of communal relationships. They

communicate our needs to others. They allow others to be responsive to our needs.

Being willing to express emotions indicates that we trust the other with information

about our vulnerabilities-that is, we trust the person to use that information to

support us rather than to take advantage of our weaknesses" (Clark et al., 2004).

As Clark et al. suggest emotional perception and expression is key to any relationship.

Subsequently the paper addresses the influence of blindness, deafness, and modern day

technology on the perception of emotion and ends with an application section focusing on

how this research may affect our everyday lives. "Emotions evolved as a rapid and

coordinated response system that allows humans to quickly and efficiently respond to

events that affect their welfare" (Matsumoto & Willingham, 2009). Without emotional

expression and perception life would be very different. "Emotional tendencies influence the

life course through social, cognitive, biological, and behavioral processes (e.g. Harker &

Keltner, 2001).

Recognizing Faces and Perceiving Emotion

Cowie's 2009 article discusses three different ways in which individual's study the

perception of emotion including what he refers to as impressionistic, experimental, and

technological (Cowie, 2009). According to the impressionist interpretation emotions are

consciously perceived and understood. The experimental realm of research findings show

that the perception of emotion does not always involve conscious awareness such as

mimicking another individual's behavior when in communication with them (Cowie, 2009).

Studies in the experimental vein were performed with faces and facial movement, tone and

pitch of speech, as well as with the bubble technique. This technique involves only showing

small portions of the face such as the eyes or the mouth. Participants are asked to identify the emotion the target person is displaying from only the small portion of the face they are able to see. This research has shown some support for the mouth and eyes being the two most important areas of the face when determining emotion (Cowie, 2009). Experimental studies have also shown that a number of outside influences can affect emotional recognition such as certain psychological and physical disorders, sex, and emotional intelligence, which will be discussed at greater length later in this paper (Cowie, 2009). Modern day technological advances open the recognition and perception of emotion to study in a number of different ways. Technology allows pictures of faces to seem more life like and video allows experimenters to survey actual conversations between participants. Technology also lets participants view their own conversation and explain their emotions during certain points of the video. These naturalistic contexts broaden the field by providing new ways to study emotional perception. Cowie discusses the important cues to reading emotions such as facial patterns, rapidly shifting focus, gestures, multi-modality, and setting (Cowie, 2009). The rest of this paper will address a number of these different cues as well as many of the different ways of studying emotion.

A general understanding of how people view faces is important in the broader context of the paper and specifically in the context of close relationships because the ability to recognize others' faces is imperative in everyday life. Also without facial recognition individuals may be unable to determine which faces to attend to during social interactions, which may make it difficult to accurately perceive another's emotions. Early research by Bruce and Le Voi (1983) looked at humans' ability to store, recognize, and identify faces. (Without this ability it would be difficult to understand the individual's emotions in a

greater context of the relationship between the two.) This first study used pictures of faces that were either previously presented, and thus familiar, or faces that were not previously presented and thus unfamiliar. Bruce and Le Voi found that that memory for familiar faces is much better than that for unfamiliar faces. In their second study Bruce and Le Voi used pictures of familiar and unfamiliar politicians and actors. They examined participants' ability to recognize these faces by testing them with distracter pictures of either visually dissimilar or similar faces. Reaction times were recorded. Bruce and Le Voi found that response times were longer when participants were shown faces that were visually similar to the target face than when they were shown dissimilar ones, which indicates that people have a harder time distinguishing between two similar faces than two very different faces. Bruce and Le Voi found similar results in their third study but in this study the stimuli were similar and dissimilar words. They found that words that were visually similar took longer to reject than those that were visually different and related words also took longer than un-related words. Bruce and Le Voi suggest that there are certain coding processes for different faces and that some, such as more distinctive ones, will be more easily recognized than others. While the faces used in these studies may limit this research, they demonstrate that different aspects of faces are important in recognition. These findings play a role in emotional perception because if people are better able to recognize familiar faces that are distinct from other faces, people may also have differing abilities to perceive another's emotional expressions depending on how well they know the individual. Recognizing faces is the first step in understanding how people recognize facial expressions. Adolphs (2006) examined how individuals recognize facial expressions.

    Adolphs' (2009) article on recognition of facial expressions emphasized the

importance of the amygdala in neural responses and emotion processing. Adolphs

described studies with individual's who suffer from brain damage that impairs vision.

These individuals can still, at a better than chance level, report the expressed emotion

despite the brain damage. Adolphs explained that the amygdala in the individual with brain

damage is activated to different emotions, which may play a particularly important role in

the recognition of fear and other negative emotions. This can be demonstrated with

patients whose amygdala is completely damaged on both sides of the brain. Another thing

that Adolph mentioned is the possibility that humans may understand emotions in part by

mirroring them. Scientists are continuing to explore this possibility. Adolphs explained that

the eyes and mouth are most telling of an individual's current emotional state when

isolated in bubble studies where only certain portions of the face a visible to the

participant. Amygdala damage may impair an individual's ability to read the eyes as a sign

of specific emotions. If the individual is directed to focus on the eyes however, correct

identification of the expressed emotion occurs. In a similar vein Adolphs reported that

individuals with autism do not focus on the eyes when attempting to read others' emotions.

With this information clinicians may be able to help individuals with these deficits.

Adolphs' research provides important background information for understanding what

aspects of the face people generally use when attempting to read another's emotions.

    As Adolphs did, Ellison and Dominic (1997) explored the extent that different parts

of the face help observers evaluate facial expression, and whether or not these parts of the

face are judged independently or as a whole. They also assessed how the separate parts of

the face are integrated for facial recognition. Participants were shown computer generated

faces on which eyebrow and mouth muscles were manipulated in various positions. In a forced choice task participants judged whether the emotional expression of the stimulus was happy or angry. Ellison and Dominic expected that it would take participants longer to respond when the facial expression of the stimulus was more ambiguous, when the eyebrows and mouth displayed different emotions, when one of the features was missing, or when features were only slightly removed from neutral. Ellison and Dominic found that faces are judged based on individual features, but that these features are integrated from both the bottom and top half of the face when reading emotion in another. Ellison and Dominic suggest that these results indicate that individuals are better at judging emotion when they can see the whole face. All of the facial features are combined to more accurately interpret emotion. Because it takes longer to interpret facial expression when multiple emotions are present in the features of an individual this could affect communication when someone is saying one thing but is truly feeling another. In an attempt to hide an emotion it may come across as multiple emotions, which could affect communication.

Dimberg, Thunberg, and Elmehed (2000) assessed whether or not individuals mimic facial expressions if they are not consciously aware of the expression. In each of three conditions student participants were either shown happy faces masked by neutral faces, neutral faces masked with other neutral faces, or angry faces masked with neutral faces. Participants were not consciously aware of the target stimuli that appeared before the neutral masking face appeared. Dimberg et al. measured muscle activity during the experiment using electrodes and found that the happy with neutral mask group showed significantly more zygomatic major muscle movement (the muscles involved in smiling) than did those in the angry with neutral mask group. The opposite was found in the angry

with neutral mask group. In this group Dimberg et al. found that the frowning muscles, or

the corrugator supercilii, were significantly more active than in the happy masked with

neutral group. These results suggest that despite having no conscious awareness of the

happy or angry faces participants were still influenced by them and responded by

mimicking the expression. Therefore, initial facial reactions may occur before the

individual can consciously control or report the emotion. Dimberg et al.'s findings

demonstrate that emotions may be processed and communicated even at an unconscious

and automatic level. When in communication with a partner in a close relationship it is

important to take into account that facial expressions are displayed even at a subconscious

level.

Emotional Perception and Recognition

Losses and Gains
By: Marcheta Evans
Betty came to counseling to find a way to deal with the loss of her daughter. She did not
want to include her husband, Fred, in the sessions for an unexpressed reason. Her main
issue was battling with depression, which was affecting other areas of her life such as her
marriage and her relationship with her son Michael. When Betty first came to counseling
she demonstrated flat affect and a high need for control. Guilt issues were also a possible
cause for her unhappiness. Betty secluded herself from her normal life and everyday
activities since her daughter died and was avoiding her son because he was her daughter,
Brooke's, twin. Seeing him reminded her of Brooke, which was straining her relationship
with him. To some extent Betty was also being overbearing, which she reported was out of
fear of losing Michael too. She reported that Fred was closed off about talking about
Brooke's death and that she and Fred did not communicate about it. In response Betty
reported closing her self off in response, which led to big blow-ups when she could not hold
in the hurt any longer. Fred and Betty seemed to be dealing with the loss differently. Before
Brooke's death Fred and Betty did not have trouble with their communication and were
very open with each other. The loss also was affecting their sexual relationship and their
intimacy. At this point Fred started coming to individual counseling sessions to prepare for
family therapy. Both Fred and Betty felt extremely alone. Eventually the couple came to
counseling together, which allowed them to explore how they were dealing with the grief of
loss differently and how they could meet in the middle to deal with it together.

Frith (2009) discussed the role of facial expressions in social interactions and the role of unconscious awareness. Facial expressions and sensory signals can be both consciously and unconsciously perceived and are extremely important in social interaction. Frith explained that one way the communication of emotion occurs is through imitation and this mirroring or contagion is many times inadvertent and unconscious (2009). This imitation allows the individual to, in a sense, experience the emotion of another and therefore gain a better understanding of the other's feeling at that moment and facilitates better communication (Frith, 2009). Also when an individual mirrors another's emotional expression they are communicating that they understand how the other is feeling. Thus, Frith explained, emotions can also serve as a communicative signal. In this sense emotions can be consciously used as a means of communication. However, when one person in a couple, such as Fred in the case study above, is completely shut down and displaying flat affect this may impede communication. Betty closes herself off in response to Fred showing little or no emotion. Here Betty does mirror Fred's lack of emotional expression, but in this case it hinders and harms the couples' communication. In a situation such as this one where the couple has lost a child there is a lot of room for a couple to misinterpret the others emotional expressions. As we see from Betty and Fred they both dealt with the loss in a different way and thus thought the other was dealing with it incorrectly. This affected their relationship and made it difficult to read each other. In the past they were very open and a stressful life event influenced how they read each other's emotional expressions. One of the nonverbal signals Frith discussed was eye gaze. Knowing where another individual is looking can help one infer their intentions and eye gaze is also an indicator of trustworthiness. Following eye gaze is automatic and unconscious. When subjects had

prosopagnosia they still showed an emotional response to faces of those people they knew even though they were unable to identify the individual (Frith, 2009). Unconscious emotional signals are often less deceptive because the individual does not control their appearance. When Fred hides his emotions it may send the message to Betty that he does not feel remorse about losing their daughter when in reality he does, but is just dealing with the loss in a different way that Betty. Betty is deceived about how he is truly feeling due to his lack of emotional expression. Deception in emotional cues is an important part of emotional perception to take into consideration when thinking about emotions in a social context. Mirroring is important because it provides an outlet for people to convey understanding to a partner or close friend without verbally expressing this, whereas eye gaze is less controlled and therefore does not provide as direct of an outlet for purposeful communication. When this outlet is closed off, however, it has the potential to create more problems. Goldman and Sripada (2005) also discussed the effects of mirroring or simulating another's emotional expression, but focus on the issues that arise when brain damage affects this ability.

Goldman and Sripada (2005) combined evidence from multiple theories and studies that assessed deficits in producing certain emotions and identifying them in others. Goldman and Sripada referenced Adolph's (2012) study showing evidence that amygdala damage affects emotion recognition. Because people with amygdala damage are not fearful they have an especially hard time identifying fear in others. A number of patients with brain damage support this finding. Studies using fMRI showed that when participants observe others with a disgusted face the same neurons for experiencing disgust are activated in the individual who is observing. This supports the idea discussed by Frith that

mimicking another's emotions may help one experience what another is feeling. As in the case study of Fred and Betty, however, it may not always be beneficial to experience what another is feeling. While this may be beneficial when two couples are communicating in positive situations it may cause problems when couples are experiencing distress or at times when a counselor needs to remain neutral instead of expressing understanding with either individual. In much the same way Goldman and Sripada explained that emotional contagion produces convergence in two interacting individuals' emotions. This mind reading tactic facilitates communication. As with emotional intelligence someone who experiences deficits in the ability to produce emotion will have a difficult time decoding how another feels by observing their facial expression just as an individual with lower emotional intelligence may have difficulty perceiving others emotions. Dimberg, Thunberg, and Grunedal (2002) examined emotional expression from the perspective of the person producing the emotion. They assessed the possibility that facial reactions may be automatic, which would make masking or hiding an initial emotion difficult.

Holding the Family Together
By: Fred J. Hanna
When Donna and Nick initially called in to schedule counseling the problem was that their son Josh, age 2, was having trouble using the bathroom. They had seen doctors who told them that nothing was physically wrong but he had not used the bathroom in 2 weeks. On top of this things had been irregular for about 6 months. Doctors said that Josh's problems might be stress related. Josh's eyes were distant, and he seemed emotionally preoccupied, and sad. Josh responded to questions with blank stares giving no insight into his emotional feelings. Although Josh was not responding when the therapist asked Josh questions such as "are you happy" Nick and Donna shifted and squirmed in their seats which was a nonverbal cue that they were uncomfortable with the questions. Donna and Nick seem distant making little to no eye contact, acting cold, and "subtly antagonistic." Donna and Nick mentioned that they saw two different therapists for marital counseling and didn't feel that it helped and that their marriage issues were not related to Josh's issues. Donna and Nick were rather jumpy about this and did not seem to want to explore those issues. As Donna and Nick revealed more about their marriage it became clear that their relationship lacked passion. Their sexual interactions are few and far between, and their body language that portrayed lack of interest in the other person, which sent the message that they did not care about each other. Nick acted deliberately cold, and would stop communication altogether. Josh was often present when Donna and Nick fought and sometimes even sat on Donna's lap as the two yelled insults at each other. It became clear that Josh's bathroom issues were stemming from his parents fighting. The counselor thought that Josh was trying to 'hold' the relationship together because the only time the two seemed happy and worked together was when they were trying to get him to use the bathroom. Donna and Nick refused to work on their marriage in the counseling. The counselor explained that if they wanted to help Josh but refused to work on their problems that they would have to at least fake being happy around him. They would have to act like they enjoyed each other's company, not fight with him present, and spend time together as a family. This 'faking' of their relationship did work to solve Josh's problems, and he began regularly using the bathroom within the next couple of weeks. Interestingly, the couple never opened up about their relationship, and in follow-up phone conversations months later they were still 'faking' the relationship. The couple somehow learned nonverbally to conceal their emotional disconnect from their son but remained so closed off that they were not even willing to work on their own issues.

A study by Dimberg et al. (2002) contained three experiments that examined the automaticity of emotional facial responses to stimuli. Dimberg et al. aimed to determine not whether unconscious processing occurs, but the automaticity of facial reactions. Dimberg et al. suggested that there is potential for spontaneous emotions to interfere with emotional facial responses that are consciously controlled (2002). This means that another person

could perceive these automatic facial responses even when an individual attempted to control their expression. EMG recordings of both the smiling and frowning muscles in the face were taken in all three experiments. In the first experiment Dimberg et al. instructed participants to smile or frown at pictures of either a happy or angry face. Dimberg et al. hypothesized that participants would have a harder time smiling at a frowning face and frowning at a smiling face than smiling at a smiling face or frowning at an angry face because the initial and automatic reaction is to mimic facial expressions (2002). They found that a larger frowning response occurred to angry faces than to smiling faces and smiles to an angry face were smaller than those to a happy face (Dimberg et al., 2002). This indicates that these emotional responses are somewhat automatic. The automaticity of emotions brings up an important aspect of Donna and Nick's case study. When the couple came to counseling with their son's issue they did not agree to work on their marital issues, and only wanted to focus on their son. They began masking their true emotions, which seemed to solve Josh's problem. However, Nick and Donna's relationship still remained rocky. The initial emotional reactions that they two are trying to hide may cause problems later in their relationship or may resurface again causing future issues for Josh if Dimberg et al.'s findings about automatic emotional responses holds true. The combination of the couple's body language and initial, automatic emotional reactions may give away their distant and cold feelings toward each other. The second experiment sought to replicate the first experiment. Dimberg et al. found that mimicking the emotional state in the stimulus picture presented occurs much faster than responding with the opposite emotional expression (2002). The third experiment was similar to the previous two except that Dimberg et al. replaced the emotional facial stimuli with pictures such as a snake or a flower (2002). They

hypothesized that participants would be more likely to respond to a snake with a negative

facial expression and a flower with a positive emotional expression. The instructions were

the same as in the first experiment asking participants to either smile or frown at the

different pictures. Dimberg et al.'s results paralleled the first two experiments showing that

participants responded more quickly and with larger smiles to the flower stimuli, while

they responded more quickly and with larger frowns to the snake stimuli than when they

were requested to either smile at the snake or frown at the flowers (2002). These three

experiments together indicated that initial and automatic responses to emotional faces as

well as to other positively and negatively associated non-human stimuli are difficult to

control. These experiments provide interesting implications for masking automatic facial

expressions during communication because these initial emotional responses are

indicators of how the individual truly feels. While this may be true, it may also be difficult

for individuals in everyday life to recognize these brief and initial automatic emotional

responses in others. The question of whether or not people can recognize these brief and

automatic responses may play a significant role in the case study of Donna and Nick. The

two may continue to try and hide their fights from their son Josh, and he may continue to

believe the façade or as he ages he may be able to pick up on his parents automatic

emotional responses that are insufficiently masked by Nick and Donna's attempt to control

these negative emotions. Aviezer, Bentin, Dudarev, and Hassin (2011) furthered Dimberg

et al.'s study as they assessed the affects of context on the automaticity of emotions.

    While other studies have assessed automatic emotional reactions to facial stimuli,

Aviezer et al. evaluated automaticity of facial responses depending on the context (2011).

Aviezer et al. predicted that contextual cues would influence participants' perceptions of

emotional expression. In their first experiment participants saw pictures of individuals

displaying emotions that did not match the context, such as an individual displaying a

disgusted face in a context of fear, matched the context, or were similar. (Aviezer et al.,

2011). Participants were instructed to identify the emotion of the individual in the picture

and to ignore the context indicating the context was irrelevant. The results revealed that

participants had a difficult time identifying emotions that did not match the context,

especially when the context was highly similar to the expression such as an expression of

disgust in a context of anger (Aviezer et al., 2011). This identification difficulty occurred

even though participants were instructed to ignore the context. These results indicated

somewhat automatic integration of contextual cues when perceiving emotional expression.

The second experiment assessed the affects of cognitive load on emotional recognition. If

judgments of emotions automatically integrate context then this should occur despite any

amount of cognitive load (Aviezer et al., 2011). Participants memorized a sequence of

letters and numbers before and after judging the presented facial expression to induce

cognitive load. As in the previous experiment emotional faces were presented in multiple

contexts, such that they were highly similar, matched the context, or did not match at all

(Aviezer et al., 2011). The results showed that despite cognitive load participants still

tended to integrate context when making judgments of emotional expression. Thus Aviezer

et al. suggested that context affects emotional perception even when the context is

supposedly being ignored providing evidence that his integration is unintentional and

effortless (2011). This is also important in the perception of changing emotion expressions,

which Sacharin, Sander, and Scherer (2012) discuss.

    The ability to identify another individual's facial expression is important in social

interactions. Accurately judging another's expressions, as they change across the course of

a conversation, may be difficult because the initial emotional displayed may influence the

interpretation of the second or future emotions. This phenomenon is referred to as

hysteresis. This may be especially likely to occur when the two emotions are somewhat

similar and thus more easily confused, such as in the case of anger and disgust. A study by

Sacharin, Sander, and Scherer (2012) assessed this issue of perceptional accuracy in

changing emotional expressions. In the first study participants completed a simple

emotional recognition task, where they simply identified the emotion on the face

presented, as well as an emotional morph task, where they identified throughout a number

of frames what emotion was displayed as the emotion slowly switched from frame to frame

(Sacharin et al., 2012). Sacharin et al. found that participants were good at identifying

single emotions, but hysteresis effects did emerge in faces that morphed between similar

emotions such as anger, sadness, and disgust. Therefore, when similar emotions were

shown, it took participants longer to identify when the emotion changed because the

previous emotion affected this judgment. In the second study Sacharin et al. used avatar

faces created on a computer to minimize any affects that may have been due to human

differences in facial expression. The set up of this study was similar to the first. Sacharin et

al. found hysteresis patterns once again for anger to disgust, sadness, fear, and neutral

expressions, from sadness to neutral, disgust, fear, and surprise expressions, as well as,

from disgust to fear, and neutral expressions and finally both surprise and fear to neutral

expressions. Sacharin et al. found that for some emotions, such as fear to surprise,

participants indicated no change occurring at all. This second study further supported the

findings of the first. In the third study the displayed emotion changed in a morphing

sequence and participants were asked to stop the sequence when they believed the

emotion changed (Sacharin et al., 2012). Similar to the first two studies participants took

longer to identify changes in the same emotion pairs as those in the previous two studies.

Sacharin et al. found that the seven emotional changes that were consistently seen as hard

to identify in all three studies were anger to disgust, sadness to disgust, fear to surprise,

sadness to fear, surprise to neutral, and anger to neutral. These three studies demonstrate

the challenge of accurately perceiving another's actively changing emotions, which is a

possible source of problems in the context of social interactions.

An Affair to Forget
By: Phyllis Erdman

The presenting problem that brought this family to counseling was that their son David got caught with drugs and one of the requirements of his probation was that he attend therapy. Rick, David's father, expressed that he didn't want the counseling to focus on David's drug problem because he felt there were other more important topics to discuss like David's increased hostility and oppositional attitude. Rick also felt that Paula, his wife and David's mother, gang up against him. At the beginning of the counseling sessions the family's Global Assessment of Relational Functioning score is unsatisfactory. This indicated that there were other problems within the family that needed addressed besides David's drug problem. Some of the issues that came up during counseling included the parent's unwillingness to address their marital issues. Also, there did not seem to be a clear spousal cohesion or support system, which may be one of the reasons that Rick felt like Paula and David were in an alliance against him. Paula, on the other hand, felt like Rick had too much control over the family. The family environment was bitter and detached and could be described as a rigid emotional climate. Paula and Rick refused to be vulnerable to each other and this was affecting their sexual interactions. As the counseling sessions continued it surfaced that Paula had three affairs. The marital conflict now seemed to be the heart of the family problems, and so the kids stop coming to sessions and they begin to focus solely on Paula and Rick's relationship. During the sessions Rick used sarcasm and blame and Paula seemed very unsure about what to do in general with the issues at hand. Both had previously experienced divorce where they felt that they were abandoned. Rick felt that the relationship was always all about Paula and she continued to seem detached from the situation. Paula and Rick both seem stuck in their problems and are not willing to move on. Whenever the conversation would get too emotionally intense they would turn the conversation to the problem of the kids. Opening up and discussing old problems was the only way this relationship could move forward from the issues at hand. Both Paula and Rick fear rejection and Rick mentioned that he wants demonstrations of physical affection, such as a hug from Paula to show that she cares. Both had difficulty reaching out and asking for emotional support. Paula in turn is afraid of offering support for fear of Rick rejecting it creating a vicious cycle of no support for each other. The lack of trust is another major issue within the relationship. At this point in counseling Paula and Rick start attending separate sessions. Paula explained that she and her mother were emotionally detached and Rick explained a similar situation of emotional detachment from his father. The unresponsiveness that was coming from both individuals in the couple, such as them shutting each other out emotionally, was making the problems difficult to resolve. Some of the nonverbal behaviors reported included shrugging shoulders and not responding. Rick felt that emotional expression was a sign of weakness and that expressing his emotions would make him vulnerable to abandonment. Both individuals in the relationship did not feel safe, and both continued to be verbally attacking and distant. Neither would open up to the other. Because of these difficulties they eventually divorced. At a follow up interview two years later Rick explained that he knew he could never forgive Paula for her affairs, and the two both indicated that they thought the counseling occurred too late to save the marriage.

Ruys, Stapel, and Aarts (2011) reviewed the idea that emotional responses are influenced by unconscious perception. This perspective is important to understanding how perception of others emotions, the environmental context and a number of other things influence emotional responses from the individual doing the perceiving. As in the case study above involving Rick and Paula the background information about their relationship or their previous experiences influenced their current communication style. Both Paula and Rick previously went through a divorce where they felt abandoned, which created an environment in their current relationship that was filled with fear of rejection. The influence of environmental context is illustrated in studies where participants are unconsciously primed with a fearful or disgusting stimulus and then asked whether they would prefer to watch a scary movie or sample a new and exotic food (Ruys et al., 2011; e.g., Ruys & Stapel, 2008). Even though the fearful and disgusting stimuli presented were not consciously perceived the participants more often chose to watch a scary movie when presented with a disgusting stimulus and were more likely to choose to sample the new food when participants were presented with a fearful stimulus (Ruys et al., 2011; e.g., Ruys & Stapel, 2008). These findings provided support for the authors' claim that even unconscious perception of stimuli can influence emotional response. Similarly, in Rick and Paula's case they may not have consciously realized that their past relationships were influencing how they communicated and displayed emotions in their current relationship. Ruys et al. also suggested that previous experience, and mood may influence how people perceive and react to emotional events. Similar to other studies showing that emotional response is quicker when it is congruent with the target stimuli, congruent moods may also make emotional recognition easier (e.g., Niedenthal et al., 2001 & Ruys et al., 2011).

Therefore, people who are in a positive or good mood more easily recognize happy facial

expressions than when they are in a bad or negative mood (Ruys et al., 2011). Emotional

state facilitates or hinders emotional perception. Paula's use of detachment and lack of

emotion to separate herself from her hurt, and Rick's use of sarcasm and blame kept the

two of them in perpetually negative emotional states while attempting to uncover the

problems in their relationship. According to Ruys et al.'s findings about the influence of

negative moods on interpretations of emotion, if the two are consistently in a bad mood

when communicating it may make it easier to focus on the negative emotions expressed by

the other instead of any positive ones. This may prevent them from moving forward. All of

these influences on perception are important to take into account when thinking about

communication in social interactions and perceiving, as well as responding to emotional

state in others. These findings suggest that in instances where a couple is fighting and thus

in a negative mood each individual might recognize and focus on negative emotional

displays more. As displayed in Paula and Rick's case, this could make the issue at hand

seem even more upsetting and make resolution harder to achieve.

Another context that influences perception of emotion includes initially meeting

another. Often first impressions of one another are simplified because of what little

information anyone has before getting to know someone. Rauthmann refered to this

simplified perception of others in his study as implicit simplicity (2013). These heuristics

or automatic ways of forming impressions about others are not necessarily accurate, even

though they may be efficient (Rauthmann, 2013). Rauthmann's study assessed when

implicit simplicity occurs, what leads to it, and how accurate these judgments actually are.

Similar to the wide range of emotional intelligence, some individuals may be better at

gauging someone's true emotions and personality and thus depend less on implicit

simplicity than others. Attractiveness may influence an individual's judgment of another

because attractiveness is often associated with positive attributes such as inherent

goodness, and social competence (Rauthmann, 2013). The personality of the individual

perceiving others may also influence their judgments because those with extraverted and

good socio-emotional skills should depend less on implicit simplicity when making

judgments of others' personality (Rauthmann, 2013). Rauthmann hypothesized that

attraction to the individual being judged and the judge's personality traits will both affect

the use of implicit simplicity. Rauthmann's study also evaluated whether or not these

implicit judgments are accurate. Student participants interacted in couples for seven

minutes and then were asked to rate their partners physical attractiveness, rate how much

they liked their partner, as well as fill out the Big Five questionnaire about themselves as

well as rate their partner on the Big Five (Rauthmann, 2013). The Big Five indicates

whether each individual is extraverted and allows personality traits to be looked at in

association with each individual's use of implicit simplicity. Both the individual's self-

report on the big five and their peers ratings indicate that participants who were

previously strangers us implicit simplicity when making judgments. Rauthmann found that

participants judged their partner as similar to themselves. This may encourage friendship

between two people who previously did not know each other by allowing people to get to

know each other better and start to form close relationships. As predicted, Rauthmann also

found that participants judged attractive individuals as more likeable. Extraverted and

agreeable participants relied less on implicit simplicity when judging others than those

participants with more introverted, and disagreeable traits (Rauthmann, 2013).

Extraversion and agreeableness may be indicators of good social skills meaning those with better social skills are the ones who rely less on implicit simplicity. This study relates to the perception of others' emotions because nonverbal emotional cues may provide insight into an individuals' personality as well as influence the observer's first impression of the individual. People with better social skills who rely less on implicit simplicity may also be better at perceiving another's emotional state. Further research is needed in the area to develop a connection between the two. In the next section this paper will address empathic accuracy or the ability of an individual to correctly perceive another's emotions.

Reading others Emotions and Empathic Accuracy

Batson and Coke (1983) provided experimental evidence that empathic emotion exists. Batson and Coke cited studies that demonstrate people's ability to vicariously experience what others are feeling (e.g., Krebs, 1975). This is extremely important in the context of perceiving another's emotion because how one perceives the other is feeling will affect their vicarious experience. If during conversation one partner believes the other is angry could this increase their anger as well because they mimic and thus experience this feeling of anger? If one partner inaccurately interprets the other as expressing a more positive emotion could this be helpful during a time of high tension in a close relationship? These are the kinds of questions that will be explored in the following section on reading others emotion and the impact of empathic accuracy.

Beyond Stalemate: Steps to Intimacy
By: Vimala Pillari
Ron and Sally were always fighting. Ron used anger and sarcasm, and indicated that he feared intimacy, and was even verbally abusive at times. Ron was also extremely rigid and emotionally distant. Sally met Ron in class where he was her professor. At the time that they met she was married to another man. Ron's previous relationship ended when his partner left without any warning leaving only a note. Ron indicated to Sally when she moved in that his house was his house and that she had to ask permission to move or decorate anything, which sent the message that they were not a team and that he did not trust her. Ron often yelled and expressed extreme anger even at something like Sally getting teary during the sessions. Everything in their house was either his or hers, and Sally was not allowed to touch his things. In Ron's childhood his family did not express their feelings or emotions and if you did this you were seen as weak. This lack of emotion said to Ron that his family did not care about him. Dinners were silent affairs in Ron's childhood home. Sally's mother was extremely critical and Sally was never good enough as a child. Ron and Sally also lacked intimacy having no close interaction, touching or showing affection of any kind. Ron maintained that the two kept separate bank accounts, use different bathrooms, and pay their own tabs when they went out to eat even though they were married. Ron refused to open up and be intimate. Their first assignment during therapy was for Sally to decorate the house in an attempt to send the message that the house was theirs together. Sally and Ron also started trying intimate behaviors like holding hands and making more eye contact. The two started going on dates. Once they started expressing their love things improved and led to increased openness and vulnerability.

Waldinger, Schulz, Hauser, Allen, and Crowell (2004) examined the connection between emotional expression and marital quality. Ability to perceive others emotions is imperative in close relationships because inaccurate perception of the others emotions may lead to troubled communication and unnecessary tension. Looking at ability to read others as a predictor of marital satisfaction will provide support for this point. Ron and Sally from the case study above have difficulty reading each others' desires and continue to communicate a lack of trust. Ron not letting Sally decorate 'his' house sent the message that Sally didn't have a right to be there. As a child Ron was encouraged to suppress his emotions and both Sally and Ron seem to be unable to read the others emotions, which brings them to counseling. Waldinger et al.'s study specifically measures observer assessment of marital quality, self-report of marital satisfaction, and a follow up measure

assessing marital stability (2004). Only heterosexual couples participated and half of the

participants were recruited from a psychiatric hospital (Waldinger et al., 2004). The

participants recruited from the hospital were not hospitalized for mental retardation or

psychosis (Waldinger et al., 2004). Waldinger et al. recorded participants and their

romantic partner talking about two topics of conflict in their relationship. Each participant

picked one of the discussion topics. Raters observed the conversation through a one-way

mirror. Waldinger et al. had naïve raters watch the recordings of the couples' conversations

and code for emotional expression of each participant during the discussion. The naïve

coding system used is significant because it eliminated bias and demonstrated natural

perception ability. Waldinger et al. suggest that using naïve raters is indicative of the

natural ability humans have to accurately perceive emotional expressions in others

because these raters often produced remarkably similar judgments. Waldinger et al. asked

participants to fill out the Dyadic Adjustment Scale as an indicator of marital satisfaction,

and the marital adjustment scale as an indicator of marital functioning. A number of years

after the study Waldinger et al. contacted participants to see if they were still with their

partner. Waldinger et al. found that in men and women fewer expressions of empathy and

affection indicated a higher chance of marital dissolution. Greater displays of empathy, and

fewer displays hostility from men indicated higher marital satisfaction (Waldinger et al.,

2004). Waldinger et al. also found that women who expressed more empathy were also

more satisfied with their marriage. Men who were poorly adjusted displayed less empathy

and more hostility, whereas women who displayed poor marital adjustment expressed

more distress, and less empathy (Waldinger et al., 2004). Waldinger et al.'s findings point

to many of the problems in Ron and Sally's relationship. With Ron's expressions of hostility,

anger, as well as the lack of affection and intimacy between the two there was low

satisfaction with the marriage. However, once the counselor pointed out that this could be

a problem the couple realized that it was important to open up to each other, do things that

show they care like hold hands, go on dates and make more eye contact. Once Sally and Ron

increased these displays of empathy and affection things seemed to turn in a positive

direction. This supports Waldinger et al.'s findings about marital satisfaction. These results

indicated that emotional perception and expression are both related to marital satisfaction

and maintenance as indicated through both self-report and observers' judgments. In a

counseling context, when marital discord occurs, counselors may look for some of these

emotional expressions as signs of extreme discontent in relationships and utilize others to

possibly increase levels of satisfaction, such as was done in Sally and Ron's case. Greater

displays of empathy stem from the ability to accurately perceive how another is feeling.

Thomas, Fletcher, and Lange (1997) further explored the link between empathic accuracy

and marital interaction.

Thomas, Fletcher, and Lange (1997) evaluated the influence of assumed similarity,

education, and length of marriage on empathic accuracy, which as mentioned previously is

the ability to accurately interpret how another is feeling. Thomas et al. suggested that

empathic accuracy may be a predictor of marital satisfaction, length of the marriage, and

depression. Assumed similarity was included in the analyses to eliminate it as a

confounding variable and show its possible impact on judgments of empathic accuracy.

Married couples from New Zealand participated in this study. Thomas et al. asked

participants to complete depression scales, sociodemographic scales, and a relationship

satisfaction questionnaire. Couples then reported a number of reasons for current conflict

in their relationship and the experimenter chose two topics for the couples to discuss while

being videotaped. After couples completed the discussion they were separated into rooms

to watch the video. Thomas et al. instructed them to stop the tape when they remembered

specific feelings or thoughts occurring during the conversation and record them in detail,

as well as mark the time on the tape. The recorded times were then given to the opposite

partner who was instructed to stop the tape at the recorded times and report how they

were feeling at the time, as well as their perceptions of their partner's feelings at the time.

Thomas et al. found that assumed similarity correlated with marital satisfaction. This may

indicate that those couples in positive relationships may assume greater similarity than

those in relationships experiencing discord. Thomas et al. also pointed out that motivation

to accurately read a partner's emotions may be based on the situation of the marriage. A

couple experiencing marital distress may be less motivated to accurately read the emotions

of their partner as a coping mechanism for dealing with or denying the issues at hand.

Thomas et al. also found higher empathic accuracy in couples that demonstrated similar

levels of cognitive focus. Overall, the results showed that couples with higher levels of

education and shorter marriages demonstrated the highest levels of empathic accuracy.

Thomas et al. suggested that those who have been married longer are less motivated to

resolve disputes and become comfortable with one other thus, they assume their

perception of the other's expressed emotion is more accurate than it really is.

　　　Papp, Kouros, and Cummings (2010) also assessed emotions in marital conflict, and

the influence of empathic accuracy, assumed similarity. The role of expressed emotion has

previously been linked to relationship adjustment (e.g., Fletcher & Thomas, 2000). Papp et

al.'s study expands on this previous research to look at the role that emotional perception

and empathic accuracy play in marriage. Papp et al. suggested that individual's ability to

accurately perceive their partner's emotions during conflict may correlate with

communication quality and possibly higher marital satisfaction. Papp et al. also assessed

the affects of assumed similarity on couples' interactions. While assumed similarity may be

positive when the couple is happy, assumed similarity during times of dispute may

perpetuate the issues at hand. Thus, assumed similarity would only be beneficial in positive

situations. Depression may also play a role in impairing emotional understanding. Papp et

al. recruited participants from a small city it the Midwest through the newspaper, mail, and

fliers, as well as advertisements on television and the radio. It was required that couples

have lived together for two years to participate in the study. As in other studies of

emotional communication couples participated in a videotaped discussion about a problem

in their relationship. Participants individually filled out questionnaires including

depression scales, and measures of marital satisfaction. Following the couples' discussions

Papp et al. asked them to rate, on a Likert type scale, the intensity of the certain emotions

felt during and after the conversation, as well as how they thought their partner was

feeling. Comparing couples ratings of themselves and to those of each other indicated that

couples were able to accurately interpret their partner's emotional expressions. Observers

also rated the interaction between the couple on dimensions such as perceived trust

between the pair, engagement in the conversation, emotional responsiveness, and ability to

resolve the conflict (Papp et al., 2010). Papp et al. found that couples were significantly

better at reading negative emotions such as, sadness, and fear, than they were at reading

positive emotions. Papp et al. showed that higher levels of depression were correlated with

higher levels of assumed similarity and lower empathic accuracy of anger. This finding

suggests that those individuals experiencing depression may assume that their partner shares similar negative or sad feelings perpetuating their own sadness as well as possibly affecting their partner's happiness. When one partner had higher levels of depression, expressed as sadness, wives responded by assuming their husbands felt the same sadness, while husbands showed higher levels of empathic accuracy. Papp et al. offered the interpretation that females may be more expressive giving husbands more cues to their sadness whereas husbands do not express sadness as openly so women rely on their own feelings to judge their spouses'. These findings indicated that those experiencing higher levels of depression may have more difficulty interpreting certain emotions of others. Papp et al.'s study revealed the complexity of interpreting emotions, however, the results showed that increased empathic accuracy does correlate with higher levels of instrumental support shown in participants' ability to more consistently and accurately read negative emotions over positive emotions (2010).

While empathic accuracy may positively influence marital interaction, empathic accuracy also can be manipulated and used in a negative way during communication. Simpson, Orina and Ickes study (2003) analyzed this possibility. Simpson et al. explained that in everyday conversations, that are nonthreatening, empathic accuracy is correlated with increased relationship satisfaction and quality; however, in threatening disputes empathic accuracy may lead to more negative feelings because of greater perceived differences. In nonthreatening situations empathic accuracy can provide clarity in conflict, prevent future conflict, and promote higher relationship satisfaction, whereas, in threatening situations empathic accuracy may cause a decline in relationship satisfaction. Simpson et al. recruited couples who were married for a year or more with fliers in a local

community. Prior to participating in the videotaped discussion about a topic they chose

couples were separated to fill out questionnaires. These included measures of perceived

closeness. After their discussion couples were again separated and watched the videotape

of their conversation. Simpson et al. requested that they stop the tape whenever they

remembered a feeling and record the thought or feeling, as well as the time of the

occurrence. Then participants rated the how threatening the thought was, if the thought or

feeling was directly expressed, and how threatened they felt at the time. After rating their

own thoughts participants re-watched the tape, which was stopped when their partner

recorded a feeling and were instructed to record what they perceived their partner to be

thinking or feeling and rate, on the same 7-point Likert scale, how threatening the thought

was, if the thought or feeling was directly expressed, and how threatened they believed

their partner to feel. Simpson et al. found that when participants were more empathically

accurate and the situation was more threatening they experienced a decline in reported

closeness whereas more empathic accuracy and less threatening thoughts related to an

increase in closeness. Simpson et al. predicted that long-term declines in closeness could

negatively affect overall relationship quality. Thus, it may not always prove beneficial for

participants to accurately read their partner's emotions.

Time Wasted or Time Invested?
By: Thomas Scofield
Mark and Linda were having trouble expressing their opinions for fear of rejection to each other, and were fighting a lot using sarcasm. This emotionally isolated the two from each other and brought them to counseling. Mark's fear of Linda leaving made him act submissive and like he was always trying to please her. Linda said her way of dealing with things was to shut down whereas Mark wanted to talk about things right away. The two sat directly opposite each other during therapy. Mark showed affection by touching Linda's knee during therapy. When Linda felt overwhelmed and pulled away Mark tended to latch on and try to make things better when really Linda needed her space. Mark tended to be more emotionally expressive and admitted that he sometimes manipulated the situation to fit his needs when they are talking about a problem. When Linda was not emotionally responsive Mark responded by using sarcasm. Mark felt that he could tell when Linda was keeping things from him because of her eyes. Mark read her eye movements as nonverbal signals from Linda that she was not saying things that she felt even if they were relevant to the conversation or issue at hand. When Linda was talking at one point Mark smirked, which made Linda mad because he seemed to be questioning what she was saying. Mark shrugged in an apology. Linda admitted that what Mark said previously had some truth but also pointed out that Mark's smirking did not help the situation. Linda needed to be more emotionally expressive instead of letting Mark bother her because this made her emotions about the situation build up inside and tended to cause more fighting, such as the smirky comment. Linda explained that she could feel the contempt when Mark smirked. As Linda expressed more Mark felt more secure and felt he didn't need to resort to sarcasm to pull out her feelings.

As in Simpson et al.'s (2003) study, Ickes and Simpson (1997) addressed the

management of empathic accuracy in close relationships and how empathic accuracy can

be both positive and negative. Because empathic accuracy has the ability to be both good

and bad it may be more beneficial to manage empathic accuracy than to be extremely

accurate. In Mark and Linda's case study the couple is having trouble expressing their

needs and both individuals deal with distress in their relationship differently. Ickes and

Simpson's addressed this problem by talking about the management of empathic accuracy.

While it may not be completely beneficial for Mark and Linda to be extremely accurate

when reading the other's emotions, it may help them to be a little more accurate than they

are at the beginning of their counseling. Ickes and Simpson first discussed the ways in

which empathic accuracy research is carried out including videotaped and coded

interactions between a couple, two friends, and other such pairs, as well as in marital

adjustment self-report questionnaires. Ickes and Simpson explained their initial thinking

that empathic accuracy could only be constructive because knowing how to read others

will help increase understanding and thus increase good communication and closeness.

However, this is a fallacy as empathic accuracy only helps in certain situations. Empathic

accuracy can in more negative contexts increase the level of conflict and dissatisfaction in a

relationship (Ickes & Simpson, 1997). This is made apparent in Mark's comment that in

some situations he uses manipulation to focus on his needs and not the needs of he and

Linda as a couple. In this sense his ability to be empathically accurate may be harmful to

the couple's relationship. It is also clear that some of the emotions expressed during the

couple's communication such as contempt in Mark's smirk or his use of sarcasm is harmful

because Linda can accurately read these emotional responses and this in turn makes her

shut down and not want to communicate. In this situation accurately perceiving the other's

emotion may not be beneficial. Specifically Ickes and Simpson mentioned three cases

where empathic accuracy is more hurtful than helpful, including when the conflict will not

be resolved because of differences of opinion, when misconceptions that protect the

relationship from dissolving are exposed, and when one partner causes the other pain by

revealing the truth. In all three of these cases greater understanding of how the other truly

feels may lead to decreased satisfaction and stability in the relationship. Ickes and Simpson

also suggested that empathic accuracy can become a problem when partners perceive the

other as acting more negative towards them because it may denote that the partner is

intentionally trying to cause harm even when this is not the case. This perpetuates the

problem that Mark and Linda both fear rejection. When either feels that the other is

intentionally trying to cause harm they resort to ineffective communication because of this

fear. This can cause problems in the relationship because a partner is supposed to care for

the other and provide support but these negative feelings that stem from intentional hurt

can cause dissonance. Ickes and Simpson use support from previous research that a

partner's perception of the other might blind them to the other's true thoughts, which can

serve as a protection mechanism (e.g., Berger & Calabrese, 1975; Pavitt & Cappella, 1979;

Sillars, 1985). Assuming similarity is more highly correlated with marital satisfaction than

is actual understanding and interpretation of the other's feelings (Ickes & Simpson, 1997).

Motivated inaccuracy may increase stability of some relationships. However, in the long-

term, continued inaccuracy may no longer function as a shield to problems if the threat or

dispute persists. Ickes and Simpson also discussed influences such as stress and amount of

time in the relationship that may impair emphatic accuracy. Research showed that partners

who have been together for longer time periods become less motivated to improve

empathic understanding (e.g., Berger & Calabrese, 1975). Thus, environmental factors are

also important to take into account when attempting to read a partner. Reviewing all of

Ickes and Simpsons research findings indicated that the importance of the ability to

accurately interpret another's emotions and nonverbal cues is extremely complex

depending on the situation. This needs to be accounted for when counselors and therapists

attempt to counsel couples experiencing discord in their relationship. The ability to

accurately interpret a partner's emotions may not be the problem, however, long-term

inaccuracy can also cause further issues leading to instability and an unhealthy

relationship. These findings are important because they seem to indicate that the ability to

accurately perceive other's emotions can be both a positive and negative thing for a relationship. Mark and Linda demonstrated this nicely as it becomes clear from their case study that a balance of empathic accuracy would be beneficial. Empathic accuracy may also be influenced by an individual's ability to perceive nonverbal signals, seen through their sending and receiving ability, which is examined by Buck (1984).

Buck (1984) explored a number of different procedures for examining the perception of nonverbal cues to another's emotional state including a discussion of forms of measurement and the complexities of attempting to measure nonverbal receiving and sending ability. Buck discussed the influence of receiving and sending ability during communication. Interestingly Buck reported that those people who are good at sending nonverbal messages that accurately communicate their emotional state are also better receivers. This connection between the two could possibly connect to emotional intelligence. If one has a higher level of emotional intelligence they may be better overall at interpreting and sending accurate emotional messages. Buck suggested that there are four factors that influence nonverbal receiving ability including experience in decoding nonverbal cues in both close relationships and strangers, the receiver's nonverbal expressiveness, and attention to these cues. With this information in mind the next section will look further into what causes accurate interpretations, as well as some possible causes of bias in perceiving emotion, and how this may affect close relationships and communication.

Accuracy and Bias in the Perception of Emotion

From Russia With Love
By: Karin B. Jordan
Katia and Seth moved to America from Russia a few months earlier. Katia was from Russia and Seth from America. The couple was having difficultly adjusting back to the American culture. Seth returned to many of his American ways and Katia was having trouble dealing with this. At the initial meeting Katia brought up some things that had become problems since they moved to America, such as things being much more casual and not as respectful. She felt that Seth had become less respectful and that he began using bad language with his friends. During counseling the couple turned their chairs to face each other, which served as a nonverbal cue that they are engaged which tells the other person that they both care. During therapy the couple took turns saying the positive things that had occurred in the past week. Some examples included Katia feeling that Seth was less worried about how she was dressing, spending more time together than in the preceding week, and Katia acting more accepting. The two also felt like they were being more affectionate, which was also something they were working on. The next couple of weeks the couple worked on having date nights, which communicated to the other through time spent together that the relationship was important to them. As the sessions continued the couple became more playful with each other. They held hands during the last session. Also at the last session the couple brought each other gifts that served as metaphors for their relationship. Seth brought roses and Katia brought a key that said love. These gifts were nonverbal signals of how each felt about the relationship. Seth was excited for the future and felt that their relationship was strong and could withstand hardship and Katia felt that love was the key to keeping them together. These nonverbal signals indicated that they were dedicated to keeping the marriage strong and that they were willing to take time for each other.
To continue improving on the marriage the couple needed to continue doing many of the things they did during therapy such as making sure they made time for each other, separate from their family, and keeping up with date nights to show the other they cared.

Kenney and Acitelli explored the accuracies and biases that occur in perception within a close relationship (2001). Kenney and Acitelli suggest that individuals may be motivated to see their partner in a particular way that is not necessarily accurate. This may occur because individuals idealize their relationship. Assumed similarity also plays an important role in inaccurate perception. One suggestion for why this may occur is once the couple feels close they each stop making an effort to pay attention to what the other is truly feeling and saying. This may occur because once couples in a close relationship have been together long enough they may assume they know the other well enough to interpret their

feelings accurately even with little attention. However, relationships and people are

constantly changing and thus this assumption is faulty. Katia and Seth's case study

demonstrates Kenny and Acitelli's exploration of biases in a relationship because the

couple has experienced and lived in two very different cultures. In Russia, it appears that

Katia assumed Seth had similar values to her and her culture. It became clear once the

couple moved to America however, that Seth was not as similar to Katia as he appeared to

be in Russia. As Seth returned to his American ways, which Katia described as less

respectful, and their assumed similarities disappear problems begin to arise. The accuracy

of a partner's perceptions is another problem that arises in Katia and Seth's relationship

because Seth does not think that his behaviors are a problem, even though they bother

Katia. Kenney and Acitelli surveyed and interviewed dating and married couples assessing

the accuracy of each partner's perceptions, and the well being of the relationship (2001).

The interviews were conducted separately so neither partner heard the other's responses.

Participants were asked to respond to each question from their perspective and then

respond how they believed their partner would answer. Kenney and Acitelli found bias and

accuracy in most instances of perception. This suggests that accuracy and biases are

present in most interactions. Kenny and Acitelli found that bias could actually lead to

enhancement of accurate perception as a significant amount of bias appeared in the results.

Kenney and Acitelli explained that the large presence of bias may be due to the desire to

avoid accurately interpreting threats to the relationship. Participants were motivated to

ignore threats and thus distorted their perception of the other. This mirrors Seth's

approach to the issues that Katia brought up, because he attempts to ignore her complaints

about his behavior. Because Seth may not want to change his 'American' behaviors it may

be easier for him to ignore Katia's requests for him to act more like he did when they were

living in Russia. Another possible interpretation to the bias would be when a partner is

unsure they simply assume similarity as a way to fill in these gaps in information. Certain

variables such as level of sexual enjoyment, and caring showed higher levels of assumed

similarity than those such as job satisfaction. While bias was present in many of the couple

participants, Kenney and Acitelli also found that couples show accurate perception ability

as well. They suggest that accurate perceptions more often occur in variables that are not

related to the well being of the relationship whereas variables such as relationship

satisfaction are more prone to bias. However, if couples in close relationships assume

similarity and they are similar then this bias turns into accurate perception of the

relationship. Thus, bias is not necessarily harmful to close relationships. Because Seth and

Katia acknowledged the issues that assumed similarities and biases cause in their

relationship they are able to work on overcoming the issues. Another cause of bias could

depend on whether or not the individual intended to focus on emotional expression.

Rellecke, Sommer, and Schacht (2012) explored this possibility.

         Rellecke, Sommer, and Schacht (2012) analyzed the processing of facial expressions

and the connection to intention. If the intention of the individual interpreting the emotion

affects their reading of another's emotions this could influence their accuracy. Thus,

Rellecke et al.'s study manipulated participants' intentions when interpreting facial stimuli

presented on a computer to assess this possibility. Rellecke et al. instructed participants to

either simply look at the faces, look at the faces but focus on emotion, judge gender of the

stimuli face shown, determine the emotional expression on the target stimuli, or determine

whether the stimuli shown was a word or a face. Participants pressed a button

corresponding to whether the photograph was a male or female, a face or a word, or an

angry, happy, or neutral emotional expression. Rellecke et al. found that emotional

expressions of threat were recognized more rapidly than any other type of emotion while

happy expressions have longer recognition times. This may indicate that in social

interactions it is important for individuals to be able to recognize threatening expressions

more quickly because responses are more difficult to generate, whereas in a

nonthreatening conversation with a partner it may not be as necessary to quickly identify

emotions in order to respond. Rellecke et al. also found that the processing of the

threatening facial stimuli happened automatically while the processing of the positive and

happy expressions was not automatic and relied more heavily on intention of the

interpreter. This finding suggests that intention is not as important in individuals

responding to a hostile situation because it happens automatically. Another aspect of

conversations that could cause bias in emotional expression is contextual cues.

     Aviezer et al. (2008) assessed the interplay between context cues and the

interpretation of emotional expressions. Context cues are important to take into account

when thinking about perception of emotion because the context could completely change

an individual's initial judgment of the expressed facial emotion. Aviezer et al.'s study looked

at the interpretations of anger, disgust, and fear in different contexts to see if these

emotions are confused depending on the context in which they were shown. Disgust is

most similar to anger, but is not as similar to fear. Student participants were instructed to

choose the emotion that they believed best matched the one expressed on the facial stimuli

shown. They could choose from any of the six basic emotions. Facial stimuli where

presented in a number of different contexts. For example a disgusted face was shown in a

disgusted context, a low similarity context such as one that should evoke fear, a somewhat

similar context such as one that should evoke sadness, and one that was highly similar such

as a context that would evoke anger. Aviezer et al. found that context did influence

participants' judgments of the emotional expression. Participants were less accurate when

judging an emotional expression in a context that did not match, especially when the

context was highly similar. In the second study a new group of participants rated the

intensity of the emotional expressions in the different contexts. Participants were more

likely to say that a sad emotional expression was one of fear when the face was shown in a

fearful context. In the third experiment a third group of participants were shown

emotionally expressive facial stimuli in three different contexts including a neutral context,

a context that matched the emotion and one that did not match the emotion. As in the

previous two studies Aviezer et al. found that participants were highly accurate when

judging an emotional expression in a matching context but accuracy was significantly lower

when the facial expression did not match the context. Aviezer et al.'s results show that

context does influence emotional perception, which serves as another possible cause of

biases when reading others emotional expressions.

Niedenthal, Halberstast, Margolin, and Innes-Ker (2000) evaluated the effects that

the perception of emotion has on the perceiver. In their study faces displaying different

emotions were morphed with faces displaying a neutral expression in order to create a

continuous stream of photos of changing emotional expression. Participants were

requested to indicate when they thought the initial expression changed. Before participants

judged the morphing faces for altered emotional state they watched a clip of a happy

movie, a sad movie, or neutral movie (Niedenthal et al., 2000). The purpose of the movie

clips was to influence the participants' moods before they proceeded to judge emotional

change in photographs. As expected Niedenthal et al. found that those participants in the

happy condition indicated emotional change occurring at a significantly later point when

the face was morphing from happy to neutral than those in the neutral and sad conditions.

Similarly, Niedenthal et al. found that those in the sad condition indicated a significantly

later point at which the target face in the picture switched from sad to neutral. Thus these

two groups judged more neutral faces as expressing the emotion they were primed with.

These findings indicated that an individual's mood or emotional feelings at a certain time

may influence their interpretation of others emotions around them. In a setting where

accurately reading others' emotions is important, such as for a psychologist, teacher,

attorney, or therapist the effects of mood are extremely important to take into account

(Niedenthal et al., 2000). Their own personal mood as well as the mood of a client, or

student could create inaccurate interpretations of others. Niedenthal et al.'s findings could

be expanded on in future research to see if personality or attachment style has a similar

influence on an individual's perception of another's emotional state.

Mr. and Mrs. Blah
By: Patrick O'Malley
Andrea and Michael came because they felt they were growing distant from each other despite only being married 4 years. Their sexual interactions were basically nonexistent at this point in time, and both displayed extremely flat affect when talking in therapy. The two seemed to lack an emotional bond in sessions, and their nonverbal signals seemed to indicate that they were not close. Michael and Andrea could not provide any examples from their early years of marriage indicating romantic interaction, and only said that those years lacked fighting, but did not express any loving affection. The two explained that they did not talk intimately when they dated either, and had no sense of closeness. The couple's first assignment was to think about their intimate interactions and what they were missing or what they felt they had enough of. Andrea and Michael felt that they could work on increasing their emotional intimacy. As the sessions continued the two continued to remain flat in their interactions, and lacked energy. Their relationship seemed mechanical, as they were not affectionate, did not orient themselves toward one another, and would follow through with assignments but did not put energy into them. The sessions included a lot of silence. The two wrote down what they felt their ultimate relationships would look like, and for both it included friendship, attraction, affection, fun, a future with children, and emotional support. Andrea explained that this made her sad because she realized how much of this their relationship was lacking. This lack of emotionality in the relationship led them to divorce. Without expressing emotion it was difficult to form bonds and the relationship was empty. This lack of emotional expression and attachment indicated that they had no 'blind' love.
"Attachment creates a safe harbor from the hostile environment in which we live"

Parkinson's (2005) article reviewed literature examining whether facial movements express emotions or communicate the motives of the individual expressing the emotion. First impressions of another individual are often mediated by their initial facial movements, often thought of as their emotional expressions. Parkinson suggested that facial movements couldn't be explained as simply expression of emotions, but that they may also communicate an individual's motives. Interestingly, as Andrea and Michael's case study demonstrates, there are also times in a relationship where there are little or no emotional displays. Parkinson may argue that their lack of emotional expression could convey just as much information as any other emotional expression. The lack of expression seen in this case seems to indicate that there was no longer passion in the relationship, and

that they no longer cared for each other. Or in O'Malley's words the couple lacked 'blind love.' Parkinson examined some of the modern theories in this area that suggest that facial movement may provide an outlet for socialization, such as when is appropriate or inappropriate to express facial emotions, or for communicating information, such as social motives, rather than just being a form of expression. The view of emotions as communication suggested that individuals use their facial movements and emotional expressions to communicate, not to simply display how they are feeling. When a couple does not display any emotion, such as Andrea and Michael, they are lacking this form of communication to connect them. Parkinson also mentions the importance of the physical environment, or the context, when interpreting ones facial movements. The interpretation may depend on whether or not people are present to witness the emotional expression. This could also depend on whether or not the individual expressing emotion is attempting to communicate social motives. Parkinson ends the paper with the thought that facial movements may serve a number of purposes including expressing emotion and social motives, managing conversations and affect, and even directing attention. In all of these situations facial movements and expression are important because unlike verbal communication they provide a constant stream of information that either matches or doesn't match the situation the individual is in (Parkinson, 2005). This provides endless information both about how the individual is feeling. The lack of communication that occurs when couples like Andrea and Michael do not display emotions in the presence of the other makes a relationship very hard to maintain, indicating that it is an extremely important part of intimate interaction. Another final point that Parkinson addressed is that "facial communication between members of the same culture or subculture is reliably more

consistent than communication between members of different groups" (Parkinson, 2005).

This suggests that cultural influence does play an important part in interpreting or

perceiving the emotional expressions of others. Social norms may require one culture to

suppress certain emotional expressions whereas another may not. This could create issues

for intercultural marriages because each partner may not fully understand what the other

is trying to communicate and may have a hard time reading the other person. This was

exemplified earlier in Katia and Seth's case study. Many of their problems stemmed from

Seth being American and Katia being Russian.

　　　Another bias that may occur in relationships is the different perspectives provided

from those within or from those outside the couple. Floyd and Markman (1983) analyzed

the different perspectives that those in the relationship have from those of an outside

observer. Distressed and nondistressed married couples participated in the study. Couples

agreed on a problem topic in their relationship for discussion and then communicated

about the problem in an attempt to find a solution. During the communication couples were

videotaped and Floyd and Markman had each participant use a communication box. Each

individual used the communication box throughout the conversation to rate his or her

partners expressions of positive emotion. The other partner could not see the ratings. After

the interaction observers watched the videotapes and also rated the two individuals on

how positive their emotional expressions were while communicating. Floyd and Markman

found that there are differing perceptions of emotional interactions between couples from

within the relationship than those that came from an outside observer's perspective. Those

within the relationship were rating the females as expressing more positive emotion

whereas outside observers were rating the males as expressing more positive emotional

behaviors. Consistent with previous research however, Floyd and Markman found that both outside observers and those in the relationship rate expressions of negative emotion more negatively. These expressions of negative emotion serve as indicators of relational distress. This suggests that both couples and outside observers can identify distressed couples as they rate their emotional expressions more negatively than those of nondistressed couples. Floyd and Markman also found that ratings from the women in the relationship are a more accurate predictor of discord within the relationship, and men tended to rate women as more positive even though both individuals reports of marital satisfaction were very similar. Due to these findings Floyd and Markman suggest that wives' behavior may serve as a signal of marital distress. The overall findings of the study suggest that couples may be biased when making judgments of their spouse's emotional expressions during conflict. Floyd and Markman's results indicate that in a therapy setting it may be difficult for an outside observer to objectively understand a conflict between a couple because each individual's emotional expressions and behavior may not necessarily match their subjective view of the behavior. Thus, in therapy it may not be effective to promote more positive emotional expressions because those in the relationship may already think positive emotional expressions are occurring, whereas from an outside perspective, such as the therapists, positive emotional expressions may be lacking. As with assumed similarity these observer versus insider biases may influence emotional perception and empathic accuracy in close relationships.

The Speed Demon and the Backseat Driver
By: James N. Sells
Cathy came to therapy because she was having dissociative episodes accompanied by anxiety and depression. Because of her dissociative episodes Cathy received 6 speeding tickets and her license was revoked. These occurred when she would get stressed. She would drive and not remember where she was going or how she got there. Cathy decided that her marriage was one of the things that needed to change in order for her to stop feeling this anxiety and to work through these episodes. Thomas and Cathy both grew up in homes with abusive and alcoholic parents. Because of this Thomas was a fixer but felt resentful when he fixed things because he felt that his needs were not being met as well, whereas Cathy seemed to develop health problems to gain attention and love. This combination was harmful to Cathy and Thomas' relationship because Cathy needed attention to feel loved and Thomas often wanted time to himself to not be saving someone else. It was during these times Cathy felt like he did not love her. Thomas felt like Cathy was too demanding and never thought about him and his wellbeing. Thomas withdrawing and trying to take time for himself made Cathy crazy because she felt that this was a sign that he didn't love her. Thomas felt stressed that Cathy was taking so much saving as all of her little problems developed into much larger issues when she let them get the best of her, such as when she experienced a dissociative episode, or tried to convince her family that she developed some health problem such as arthritis. Because as children neither Thomas nor Cathy were allowed to express their emotions this may have caused their incorrect interpretations of the other's nonverbal cues, which perpetuated the discord in their relationship. Through counseling Cathy and Thomas were able to work through the problems and learned to communicate at times when Cathy felt that she was going to experience a dissociative episode.

Personality biases are also another form of bias that can influence one's emotional perception. Knyazev, Bocharov, Slobodskaya, and Ryabichenko (2008) examined the possibility that there are links between personality and the perception of emotional expressions. This study attempted to connect certain personality traits with possible biases that occur when perceiving emotion. An individual's personality traits may put him or her at greater risk of experiencing anxiety or depression. Cathy and Thomas came to counseling because they were experiencing relationship difficulties stemming from these kinds of issues. Cathy's anxiety, depression, and dissociative episodes were influencing how the two perceived each other's expressed emotions and their needs. Both grew up in unstable homes, which also influences personality and thus emotional perception. Cathy's

childhood led her to develop into a needy adult who experienced health problems to gain

another's love whereas Thomas became a fixer who feels perpetually underappreciated. In

this case personality-linked biases play a big role in the couple's troubled interactions.

Knyazev et al. presented participants with pictures of angry, happy, and neutral faces and

then asked them to rate the facial stimuli on perceived level of friendliness. Participants

also filled out personality questionnaires. Knyazev et al. found that more anxious and

aggressive personalities may correlate with greater perceptions of hostility. This could

affect everyday communication because those who are more anxious may think others are

more hostile and in turn the interaction may feel more hostile than either person intended

thus fulfilling the expectations of the anxious individual. Cathy's anxiety can be seen

causing situations such as just described. When Thomas withdraws to give himself some

alone time, Cathy's frantic response and feelings that Thomas doesn't love or care for her

demonstrate biases that could stem from her anxiety. This miscommunication between the

two perpetuates the issues in their relationship. Knyazev et al. also found that women are

more extreme in their perceptions of others, such that they seem to judge happy faces

significantly more positively and angry faces significantly more negatively than males do.

Knyazev et al. suggested that this might stem from females typically higher scores on scales

meant to measure emotional intelligence. The results of the study showed that extraverts,

those with higher IQ, and more agreeable participants also seemed to judge happier faces

more positively, and as friendlier. An awareness of the possibility that personality

characteristics may influence how we interact with others and may influence perception of

others emotional expressions could change how people communicate by reminding them

to be aware of the biases to which they are prone. Once Cathy and Thomas realize that their

childhood and differing personalities may affect their perceptions of the other's emotions

they are better able to understand why they are experiencing discord in their relationship.

Knyazev et al.'s study on personality-linked biases ties into personality influences, which is

discussed in more depth in the next section of this paper.

**The Influence of Personality and Emotional Intelligence on Reading Emotional
Expressions**

The previous section discussed a number of biases affect emotional interpretation

and one specific bias that differs depending on the individual is the influence of personality

traits, as well as emotional intelligence. Like intelligence quotient, emotional intelligence

varies depending on the individual. This section will address and expand on Daniel

Goleman's innovative work on emotional intelligence.

Gomez, Gomez, and Cooper (2002) explored the possibility that the specific

personality dimensions of extraversion and neuroticism are correlated to how individuals

perceive positive and negative emotional information. They predicted, based on previous

research, that current mood as well as personality characteristics would affect processing

of emotional expressions (e.g. Bower, 1991; Rusting, 1998). Specifically, Gomez et al.

predicted that those participants in a more positive mood would be biased towards more

pleasant perceptions and interpretations whereas those in a more negative mood would be

biased towards negative interpretations and judgments of emotional information. They

also predicted that participants in a positive mood would have better recall for the pleasant

and those in a negative mood would recall more of the unpleasant. Gomez et al. asked

participants to complete personality questionnaires and a questionnaire assessing the

participants' mood state at the time. Then Gomez et al. had participants participate in tasks

assessing their judgment or processing or neutral, pleasant and unpleasant information. In

the emotional information section participants completed a word fragmentation task where they were asked to fill in the rest of a missing word, a word recognition task, and a word recall task. Gomez et al. found that extraversion was correlated with more positive words produced in the fragmentation task, as well as positive mood, and neuroticism was correlated with a higher number of negative words produced in the word fragmentation task and negative mood. They also found that, as predicted, those higher in neuroticism recalled more negative words and those higher in extraversion recalled more positive words. These results suggest that personality and mood influence individuals' perception of emotional stimuli. This can affect everyday communication as those who have certain personality characteristics may be biased towards interpreting emotional information more negatively or positively than is necessarily displayed in the situation and may be more likely to remember more positive or negative emotional interaction with others depending on their personality or the mood they are in at the time. The identification of these biases could influence how counselors and therapists interact with their clients because making them aware of these biases could possibly eliminate some of the effects that personality seems to have on emotional information processing.

When the Problem Becomes a Gift
By: Gabrielle Carey

Janette brought in Andy because she felt that he was being hyperactive and that this was causing problems for her and her new husband Stanley. Janette divorced Andy's biological father and was remarried to Stanley. One of the reasons that Janette was so frustrated with Andy was because she felt that Stanley's parents judge her because Andy is hyperactive and creates problems. Stanley's parents are very straitlaced and thus have very high expectations about how Janette and Andy act. Janette was also having a difficult time allowing Andy to be a child, and the problems with Andy were straining Janette and Stanley's relationship. When Andy and Janette came to therapy Andy felt uncomfortable with what his mother was saying about his behavior and pulled his head into his shirt in shame. Janette didn't seem to realize that what she was saying was making Andy upset. The counselor brought out the problem by asking Andy if he felt like a turtle, which she picked in an attempt to find something that Andy could easily relate to as a young child. Andy responded that yes he did feel bad. The counselor asked if Janette would also be willing to ask Stanley to attend counseling sessions so that the whole family will be present and they could address whether or not there were bigger relationship issues at hand. When Janette, Stanley, and Andy all three come to counseling the issues between Stanley and Janette surface. Janette admitted that she felt his parents judged her and felt that she trapped him into marrying her because the two got married due to her becoming pregnant with Stanley's child. Janette also admitted that she worries about impressing Stanley's parents. During the counseling sessions Stanley played with some blocks with Andy, which showed him that he cares. Andy did not show signs of unusual hyperactivity for his age. With the lack of communication about the problems at home this family felt that Andy had a hyperactive disorder when really he needed some attention and was having trouble with his parents divorce.

Austin (2004) investigated the correlation between emotional intelligence and tasks involving facial expression recognition. This is important when examining issues such as Stanly, Janette, and Andy's case study because missing emotional cues may perpetuate issues within a relationship or may make the couple misunderstand them all together. For example, Janette has a hard time reading her own child, Andy. As Janette talks about the issues occurring with Andy, she does not seem to realize that this is upsetting Andy. Her lack of ability to accurately interpret what Andy is feeling by his emotional behaviors indicated that she has difficultly accurately reading his emotions. This may carry over into her relationship with Stanly, her husband. Stanly and Janette do not even discover that they

have issues until both attend the counseling session with Andy. This further serves as an indicator that Janette may not be highly adept at emotional perception. Higher emotional intelligence may predict higher speed of processing for emotional information thus Austin used inspection time to assess emotional intelligence. Participants were asked to complete an emotional intelligence assessment. A correlation between performance on emotional recognition tasks and emotional intelligence score would serve as an indicator that the two are correlated and that the emotional intelligence measure is valid (Austin, 2009). Austin asked participants to complete two emotion recognition tasks, and a third task that involved non-emotional recognition speed. One of the emotional recognition tasks was timed and the other was not. Austin found that all three of the inspection time tasks were correlated and the emotional recognition task scores remained significantly correlated even when the non-emotional recognition task was taken out of the analysis. Austin suggests that emotional recognition is not related to processing speed in general, but is a separate ability. Correlations were also found between the emotional intelligence assessment and inspection time in the emotional recognition tasks suggesting that the emotional intelligence assessment used in this study is valid. This study supports the idea that individuals have different levels of emotional intelligence. This is important when thinking about the influence of emotions on communication skills because one individual may be naturally more adept at interpreting another's emotions. This may play a key role in cases such as Janette and Stanley's, as well as in many of the cases mentioned previously. Future studies looking at the possibility that emotional intelligence is correlated with relationship success and communication skills would help confirm this. Slovenly and Mayer (1990) also explored and further attempted to define emotional intelligence.

Slovenly and Mayer reiterate a previous definition of social intelligence as "the ability to perceive one's own and others' internal states, motives, and behaviors, and to act toward them optimally on the basis of that information" (Slovenly & Mayer, 1990; e.g., Thornike, 1920). Whereas Slovenly and Mayer define emotional intelligence as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (1990). This definition suggests that understanding and expressing emotion are what make up emotional intelligence. Studies, such as the one done by Austin (2009) suggest that this ability does exist. Perception focuses on this process of "recognition and use of one's own and others' emotional states to solve problems and regulate behavior" (Slovenly & Mayer, 1990). These authors also point out that there are individual differences in the ability to understand and express emotions making emotional intelligence a continuum. This understanding of emotional intelligence as a continuum can be applied in every case study mentioned in the current paper so far and also applies to all the future case studies mentioned. In this same line of thinking empathy is extremely important because it allows people to more accurately interpret and understand the emotions of those around them thus making it a very important component of emotional intelligence (Slovenly & Mayer, 1990). Another aspect of emotional intelligence that Slovenly and Mayer suggest is key is the ability of the individual to evoke emotions in others. Not only is it important to be able to read others but also it is imperative that we express emotions in a way that others can understand. The ability to do this contributes to emotional intelligence.

Edgar, McRorie, and Sneddon (2012) analyzed the possible connection between personality, emotional intelligence and the perception of emotion. This study connects

Slovenly and Mayer (1990) and Austin's (2009) ideas about personality and emotional intelligence. Edgar et al. (2012) point out at the beginning of the study that emotional intelligence is similar to intelligence quotient in that it is not fully present or absent from an individual, and they suggest that the ability to interpret others' emotions is connected to emotional intelligence, and personality factors. Edgar et al. asked student participants to rate the intensity of facial emotional expressions on a number of video clips. The video clips were presented without any sound. Following this, participants filled out questionnaires assessing personality, and emotional intelligence. Edgar et al. found that those participants with higher scores of emotional intelligence significantly more accurately and more quickly rated the emotions of the presented facial stimuli. Participants who scored higher in neuroticism were less accurate in identifying negative emotions such as fear. These neuroticism findings were similar to those of Austin (2009).

Austin (2005) assessed the possibility that individuals with higher emotional intelligence will score higher on tasks assessing speed of emotion processing. If supported this would suggest that those with higher emotional intelligence can more quickly make emotional judgments. Austin had participants engage in emotional discrimination tasks between happy and neutral faces and another between sad and neutral faces. A facial stimulus would appear on a screen and participants were asked to press a button indicating whether the emotion displayed was happy or neutral. Austin used the same procedure for the sad and neutral facial discrimination task (2005). Participants also performed a recognition task where they were asked to identify which emotion the facial stimuli displayed. This part of the study included six hypothesized universal emotions of happiness, sadness, fear, anger, surprise, and disgust. Two other tasks were used in the

study assessing participants response times when identifying two neutral symbols, and emotional and neutral words. Participants were also asked to fill out a self-report emotional intelligence scale. Austin found that women participants scored much higher on the sad face emotional discrimination task, and the self-report emotional intelligence than men (2005). The results also showed that performance on the emotional recognition task was correlated with performance on the emotional discrimination task. This finding suggests that those who are better at recognizing emotions are also faster at processing emotional faces. These results show overall that those with higher emotional intelligence seem to be more accurate and quicker at perceiving another's emotions.

The next section of this paper will look more closely at the communication of emotion and perception of emotion in close relationships. This can come in the form of specifically nonverbal emotional communication, and will focus in on research that pays special attention to couples.

Communication of Emotion and Nonverbal Communication in Close Relationships

Clark, Fitness, and Brissette (2004) discussed the connection between individual's perceptions of their relationships and their emotional lives. As they predicted "there were positive, within-subject correlations between each person's rating of how communal a particular relationship was and that person's rating of willingness to express each of the emotions within their relationship" (Clark et al., 2004). Thus, those in a more reciprocal relationship were more likely to express emotions. Similarly, Clark et al. discussed that people in a more reciprocal or communal relationship were more likely not only to express emotions, but also to express positive emotions. This further indicates that those in a close relationship who perceive the relationship as communal are more emotionally expressive,

and may be more emotionally positive, which suggests that those in a more communal relationship may have more open communication. Clark et al. also mentioned that for those in more communal relationships "expressing emotion will be viewed as more appropriate and will be reacted to more positively" (2004). This suggests that not only do those in these types of close relationships express more emotionally, but they also feel more comfortable doing so. Those in more communal relationships often reacted more positively to emotional expression showing "more liking and more responsiveness in communal than in non-communal relationships" (Clark et al., 2004). Because expressing emotion makes people vulnerable to others a communal relationship provides a safe and secure environment to do this in. In a communal relationship it is understood that reciprocity is the norm. Therefore, Clark et al. suggest that those in communal relationships may express more emotion because they believe that their partner will respond to their needs. Clark et al. also report that securely attached partners are more likely to express negative emotions such as anxiety and sadness, and that guilt also seems to be expressed more in communal relationships. This suggests that guilt can serve as a motivator for relationship repair. The results summarized in this article indicate that partners in a securely attached, communal relationships experience more positive relationships. Clark et al. indicated that when individuals are more emotionally expressive others could better meet their needs enhancing positive feelings about the relationship. The expression of these emotions also indicated that the individual felt comfortable enough to express these emotions, strengthening the relationship. The general information that Clark et al. provided in their article provides a good overview of this section's topic, which will address what role

emotions and emotional expression play in close relationships and satisfaction in these

relationships.

        Burleson and Denton (1997) examined the connection between communication skill

and marital satisfaction. In the study they asked participants to complete tasks that

provided information about their communication and measured marital satisfaction.

Participants were put into two categories, those in distressed relationships and those in

non-distressed relationships. Burleson and Denton chose to look specifically at four

different types of communication skills including communication effectiveness, perceptual

and predictive accuracy, and interpersonal cognitive complexity (1997). Burleson and

Denton defined these four types of communication skill as communicating what the

individual intended to communicate, understanding the others intentions, being able to

predict how this communication will affect the other person, and the capability of assessing

social information (1997). The study aimed to answer questions addressing the influence

of communication on marital satisfaction, as well as the influence of distress on

communication. After the participant couples completed questionnaires assessing their

marital satisfaction and communication skill, they then engaged in a communication

exercise. In this exercise they used a communication box, which enabled them to record

their emotional feelings without their partner knowing. This box is a small plastic

apparatus created by Gottman to record information from each partner about how they are

feeling without the other knowing. The information is recorded using a Likert type scale

ranging from positive to negative. One of the partners would talk and then the other would

rate their own feelings, as well as how they thought their partner expected them to feel.

The partner who had just spoken rated how they intended their partner to feel, and how

they thought their partner actually felt. When coding these ratings after the conversation,

the researchers could identify how accurately the couple was communicating and

interpreting the others communication. Burleson and Denton found that better

communication skills were correlated with marital satisfaction in non-distressed partners,

whereas in distressed relationships the better the communication skills the greater the

marital dissatisfaction. Specifically, couples that were better at predicting how their

communication would affect the other felt more positively about each other. Because

Burleson and Denton did not find significant difference in communication skill between

distressed and non-distressed couples, the results seem to indicate that when there is

conflict in a relationship those who are good at communicating can use communication in a

negative way, resulting from ill intent (1997). When one can successfully identify how their

communication will affect another this makes it easier for them to produce messages that

more affectively upset the other person. When communication is used in this negative

manner this in turn decreases marital satisfaction. In support of this Burleson and Denton

found that in distressed relationships individuals reported higher satisfaction when they

did not have good social perception skills, whereas in non-distressed relationships

individuals reported higher satisfaction when they had good perception skills (1997). This

suggests that when a relationship is unhappy ignorance leaves room for higher satisfaction.

As a whole the results of Burleson and Denton's study suggest that building a satisfactory

relationship is not dependent solely on developing communication skills because better

communication skills can be manipulated and used in a negative way.

It's Not Our Fault
By: Molly Geil and William M. Walsh
The goal of these counseling sessions was to improve communication within the family. The family dynamic was very confusing because it involved two couples. The biological mom and dad were both remarried to a second partner but originally had four kids together. The two families are coming to counseling separately to deal with the 3 boys' drug problems. Their biological mother's brother sexually abused her as well as sexually abused the three boys. The two families were both dealing with different problems but the drug and sexual abuse problems carried into both families because these problems surround the children. Roy and Diane, one of the couples was improving more rapidly and were more willing to work on the problems at hand. They moved forward and start focusing on their relationship as a married couple. They started working on their communication, and are beginning to voice to each other how they feel about their relationship. Both felt that they need to focus more on their relationship because the kids had been taking so much time. Meanwhile the other couple, Douglas and Valerie, finally established a goal for their relationship but didn't meet it and seemed to be having trouble getting anywhere. Douglas and Valerie continued to blame the kids. Roy and Diane realized as they began to focus on their relationship that they needed to remove the wall between the two of them. Roy felt that he needed to share his worries more and Diane thought that she could work on being less critical of Roy, which would make him more likely to want to share his feelings. In the other couple's relationship Douglas started making goals to come home more for dinner, and spend more time with the family. In turn Valerie felt that the boys are responding to these changes. One of the main things that was a problem for both families was the lack of time spent together. This began improving as the sessions went on. Douglas was making more time to come home for dinner, and one of the families planned on taking a family trip, which they hadn't done in a long time. Roy started sharing his feelings with Diane more and their communication improved as she began focusing on listening without being critical. While the two couples originally believed the two families' issues surrounded the sons drug problems through therapy they realized that the problems were actually about lack of time spent together as a family, difficulty communicating, and couple issues for each partnership. At the end of the sessions one of the sons with a drug problem started making more eye contact and smiling more. The sessions ended for the summer but the families planned on coming back in the fall to continue therapy. They felt like positive changes had already been made and they wanted to continue making them.

Sanford (2012) investigated the communication of emotion during conflict in

married couples. The study assessed how partners express emotion, recognize emotion,

and distinguish between different emotions. One of the main problems that arose in the

case study of Roy and Diane, and Douglas and Valerie was that these two couples had

trouble expressing, and recognizing emotions in their spouses. This can be seen when Roy

and Diane recognize that they have created a wall between them, which makes it hard to

understand what the other is feeling or thinking. Another important issue that came up in

counseling was the lack of time spent together. Without time together it would be very

difficult for either couple to identify any distress or accurately interpret how the other was

feeling about the relationship. Many of the problems brought up by both couples were

originally attributed to the children. Sanford used self-report and observer ratings to assess

conversations of conflict between couple participants. Previous theories predicted that

couples pay attention to emotions specific to the event and the individual, called event-

specific emotions, as well as emotions in many contexts and in both individuals referred to

as contextual-couple emotions. Sanford also makes the distinction between hard and soft

emotion, which are both forms of negative emotion. However, soft emotion includes

sadness and hurt whereas hard emotion includes anger and annoyance. Participant couples

completed measures of emotion, and relationship distress. Observers coded emotional

expressions. Sanford found that contextual-couple emotions could make behaviors in the

relationship impervious to change (2012). This is another reason that the two couples may

have had trouble overcoming their lack of empathic understanding. In the case of event-

specific emotion Sanford found that hard emotion was very quickly identified, but may not

be as easily detected when it is not openly expressed (2012). Another interesting finding

indicated that in couples that expressed more hard emotion could not as easily detect soft

emotion whereas soft emotion expression did not influence detection of hard emotion. This

may indicate that anger and annoyance overshadow expressions of sadness and hurt.

According to this idea, in Diane and Roy's case, Diane's criticism could blind her to Roy's

emotions that make him want to withdraw from and close himself off from the relationship.

This could perpetuate issues in a relationship because the couple may one may not be as motivated to fix a problem when hard emotions cover the use of soft emotional expressions. These findings suggest that counselors should take special note when an individual is more expressive of their anger or annoyance in communication between partners in a close relationship. Gaelick, Bodenhausen, and Wyer (1985) expand on Sanford's findings about emotional expression and recognition by assessing gender bias in close relationships and how this affects emotional perception.

Gaelick, Bodenhausen, and Wyer (1985) also examined emotional communication in close relationships. Based on previous research that gender may affect perception of a partner's emotion Gaelick et al. investigated these patterns of communication (e.g. Hall, 1979). Gaelick et al. asked couple participants to engage in a conversation about a problem in their relationship. The couple was videotaped while they talked and then a few days later were asked to come back and separately code their emotions throughout the tape. Following this, Gaelick et al. asked participants to complete a relationship satisfaction questionnaire and a questionnaire assessing their beliefs about the relationship. Gaelick et al. found that men perceived their partner's lack of expressions of love as hostile, whereas women perceived their partner's lack of hostility as a signal of love. This finding supports the idea that gender differences do exist when individuals are interpreting another's expressions of emotion. Gaelick et al. also found that greater degrees of negativity in a relationship led to women believing that disagreement would ruin the relationship, partners could not accurately perceive the other's emotion without being told, the quality of the relationship could not be altered, and that there are gender differences in needs and personality (1985). The results suggest that emotional perception is dependent on context.

Thus, the perception and reciprocity of negative emotions such as hostility may be less if a couple is resolving a conflict than if they are arguing. Future studies could further analyze this possibility by asking couples to resolve a problem instead of just discussing one. Gender and context differences in communication should be taken into account in counseling.

Noller (2006) addressed nonverbal communication in close relationships and the importance of emotional expressions as a signal to others. Noller explained that emotional expressions could portray two different messages when they are used at the same time. For instance a smile accompanying a negative tone can indicate two different things to the person attempting to interpret the emotional information (Noller, 2006). Misunderstandings in perceptions can stem from inaccurate sending or from inaccurate decoding (Noller, 2006). Noller also indicated that perceptions of emotions could be influenced by personality, attention, and motivation. Noller discussed the influence of motivated inaccuracy on the perception of emotion. Motivated inaccuracy occurs when individuals do not accurately interpret another's emotions during conflict or discord whereas in positive situations accuracy is more likely. Thus, Noller points out that accuracy and relationship satisfaction are greater in positive situations within the relationship whereas, satisfaction and accuracy are negatively correlated during arguments in times of discord. Noller suggests that motivated inaccuracy may serve as a way to preserve the relationship.

"Overall, decoding accuracy tends to be affected by the closeness of the relationship, although accuracy may be lower in very close relationships when communications are perceived as threatening the stability of the relationship. The quality of the

relationship also influences decoding accuracy, at least in some studies" (Noller, 2006).

Noller also reports on gender differences indicating that men may be more generally satisfied with their relationships if they express their distress, and are more affectionate, but are less hostile (2006). Noller's findings indicate that, "nonverbal communication is important for the expression of love, for the expression of support, and to indicate the need for support" (2006).

Let Me Be Me

By: Joshua M. Gold

This couple came to counseling with the problem that their son, Steven, had been hypersensitive lately and their daughter, Kevin, had been aloof. Both the mother and father, Mary and Tim, were upset because they were experiencing these problems with the children, but they still described the family as happy and close. They also described their relationship as a couple as satisfying. Mary and Tim wanted Kevin to communicate more with them and Steven to act more mature. Steven had extreme crying episodes that were interfering with his social skills and life. Kevin experienced loss of temper, as well as irritability and argued frequently. The counselor did not think that this was really unusual for her age. The goal of therapy was to ally Tim and Mary so they would not continue to be divided by the children and also improve their collaboration through communication. The counselor would have Tim and Mary sit next to each other during sessions to emphasize their alliance. The two children would sit in separate chairs away from the parents to emphasize their individuality. Another goal was also to reframe how Tim and Mary thought about the problems they are experiencing with the two kids, such as reframing negative emotional expressions towards them that may be perpetuating the problem at hand. Tim and Mary had very high expectations of the two kids. In the first few sessions Mary and Tim spoke for the kids even when questions were asked to the kids directly. Kevin sat with her arms folded and only would look at the floor, and Steven pretended to be asleep. Both Mary and Tim seemed not to notice these behaviors. Both parents expressed frustration that Kevin would not communicate with them at home. They explained that she would go to her room and shut the door whenever they attempted to communicate. On the other hand, Kevin felt that they never really listen to her, and the parents lack of emotional responsiveness during the sessions conveyed this to her as well. Throughout the sessions the family continued to share stories from home where they are cutting each other out and not listening to each other. Tim told a story including both he and his grandfather and he and his father not getting along because neither of them were willing to listen to his input; in his father's house it was all his fathers rules. He also explained that he and his father are not close because of it. In their own experience as children Tim and Mary felt strong pressure to conform to their gender roles. Both Kevin and Steven felt pressure to live up to their parents' expectations as they painted pictures from their own perfect childhoods. Looking back Tim and Mary both realize how restricted they felt emotionally in their childhood and how much trouble they had with their own parents because of the lack of this emotional expression. Throughout the sessions Tim and Mary did learn how to work more as a team and not let the kids divide them. The parents did not get much better at accepting the kids' views however, which would continue being a problem in the family. Tim and Mary did not learn to accept that Kevin's behavior was normal for her age. Tim and Mary remained very stuck in their ways. In this case the therapist felt that emotional distance was acceptable because of the kids ages but the parents rebelled against this idea, which pushed the kids even farther away. Negotiation and meeting half way was required for this family to function as they wanted but the parents rejected this idea making it difficult to improve or change anything.

Anderson, Guerrero, and Jones (2006) analyzed information about nonverbal

behavior in intimate interactions in close relationships. This is an interesting dynamic of

nonverbal emotional communication because it looks specifically at intimate interactions.

As in the case study above involving Tim and Mary, the counselor had the couple sit close to

each other and the two children sit separately and apart from the parents to emphasize

some of the goals that they were aiming to achieve in therapy such as connecting and

forming a strong alliance between Mary and Tim as the parents. The couple also were

unaware of their children's nonverbal signals such as Kevin sitting with arms folded and

downcast eyes, and Steven pretending to be asleep. Anderson et al. focused on "(1) that

intimate interactions are necessary to develop and maintain intimate relationships and (2)

that emotions and behaviors associated with the experience of intimacy are displayed

within the context of intimate interaction" (2006). The lack of intimacy that may

accompany the family's inability to read the others nonverbal signals as emotional

expressions may perpetuate the family's issues. Anderson et al.'s goal was to demonstrate

that "nonverbal behaviors play a critical role in creating and sustaining intimate

interactions and relationships" (2006). Nonverbal cues may serve as an indicator to a

partner to whether they are involved or interested in the relationship. Anderson et al.

explain that decreased distance between the couple when interacting, direct gaze and body

orientation, more touching, leaning in, and expressiveness are all nonverbal expressions of

emotion that indicate interest in the relationship (2006). The counselor took advantage of

this knowledge when asking Mary and Tim where to sit during the sessions. Similarly, love

may be communicated through "physical closeness, positive touch, smiling, mutual gaze,

spending time together, warm vocal tones, and giving gifts," whereas, liking may be

communicated through "eye contact, smiling, facial and gestural animation, and head

nodding" (Anderson et al., 2006). Thus, Anderson et al. concluded that positive nonverbal

cues are extremely important in intimate interaction (2006). Using positive nonverbal cues

may help Mary and Tim overcome their issues to fight to remain together due to their

unbending ideas about how they think they should interact with each other and their

children.

The next section will address the issues that can occur when an individual

experiences a deficit that makes perception of another's emotional expression challenging.

Deafness, blindness, and technology all influence an individual's ability to perceive emotion

in another. The next section of this paper will examine the affect of these three things on

emotional perception and empathic accuracy.

The Influence of Deafness, Blindness, and Technology on Perception of Emotion

Dyck, Farrugia, Shochet, and Holmes-Brown (2004) analyzed whether those with

hearing loss or vision impairment have difficulty with emotion recognition and

understanding. Missing one of these key senses may inhibit an individual's ability to

recognize and interpret emotional expressions, which could in turn make it difficult to

respond appropriately in situations of social interaction. Dyck et al. used vocal emotional

expression recognition tests, and facial emotional expression recognition tests, as well as

tests of emotional understanding to determine any deficits in those with hearing or vision

loss (2004). Dyck et al. had three groups of children participants take five different tests

assessing accurate perception of facial and vocal emotion, understanding of emotional

consequences, conflicts between emotional context and expressed emotion, and ability to

accurately define emotional words (2004). The three groups included those with hearing

loss, vision loss, and those with normal vision and hearing. Dyck et al. found that children

with hearing loss have difficulty in facial and vocal emotional recognition as well as with

emotional understanding, whereas those with vision loss only appear to have difficulties

with emotional recognition tasks, but not with emotional understanding. Dyck et al. suggest

that these results indicate that emotional understanding and recognition are separate

capacities. Emotional understanding was greater in participants with vision loss than in

those with hearing loss. This suggests that both visual and auditory signals play a role in

accurate emotional perception and understanding. The deficits in emotional perception in

individuals with either hearing or vision loss affect their social interactions, however Dyck

et al.'s study showed that with increasing age and experience these individuals become

better at emotional recognition (2004). Rieffe and Terwogt (2000) performed another

study similar to Dyck et al. but they focused in on those with hearing deficiencies.

Rieffe and Terwogt (2000) examined the possibility that being deaf may affect

everyday communication and understanding of emotions. The study focused specifically on

the influence of deaf children's desires on emotional understanding. Rieffe and Terwogt

asked children in the study to explain another's emotions instead of predicting another's

emotions. They predicted that deaf children's responses would be impaired compared to

the responses made by children who do not have hearing deficits. The children participants

heard six stories including the happy, sad, and angry emotions and were then asked how

the main character in the story felt and why he or she felt this way. The stories also

included atypical emotions to see if this would influence accuracy of responses in any way.

Rieffe and Terwogt found that children with and without hearing loss were both better at

identifying typical or expected emotions. While these children could predict equally well

how the main character in the story felt Rieffe and Terwogt found that there was a significant difference between the two groups in how well they could explain the predicted emotion. In these situations Rieffe and Terwogt found that deaf children referenced desires more than those who do not have hearing deficits. Rieffe and Terwogt suggest that children with hearing deficits growing up in homes with parents who can hear may have to clarify their desires more than those who can hear because of communication difficulties. Thus, referencing desires more in an explanation of the predicted emotion may simply be how deaf children communicate. Rieffe and Terwogt also found that deaf children had a harder time identifying why an atypical emotion was occurring. When the emotion didn't match with the scenario the deaf children had a harder time that the hearing children explaining the disparity. This study showed that deaf and hearing children understand emotion and explanations for emotions somewhat differently, which may stem from the way they communicate as they grow up. Deaf children growing up in a world where everyone else can hear have to make adjustments so as not to be misunderstood. This is seen in this study as deaf children refer to desires more than non-hearing impaired children. Most and Michaelis (2012) also explored the possibility that hearing loss affects emotional perception.

Most and Michaelis (2012) explored the accuracy of emotion perception in those children with hearing loss compared to those who have normal hearing. Most and Michaelis tested children participants in three condition including exposure to only auditory information, only visual information, and in the third category to both visual and auditory cues. They predicted that normally hearing children would more accurately interpret emotion in both the auditory and visual-auditory conditions than those children

with hearing loss. They also predicted that all children with both normal hearing and hearing loss would be better at reading emotion in the visual and the visual-auditory conditions than in just the auditory condition. Children participants were shown video clips on the same actress expressing happiness, anger, sadness, and fear while saying a nonsense phrase in the tone that matched the expression. Most and Michaelis showed children the video in three conditions, the sound only condition, the visual only condition, and the visual-auditory condition. They then asked participants to identify the emotional expression in each trial. Most and Michaelis found that accurate emotional perception is lower in children with hearing loss than in those children with normal hearing in all three conditions (2012). The results of the study also indicated that children with hearing loss did not display more adept vision skills than those with normal hearing. It is often thought that because hearing loss makes one sense less useful that the other senses may make up for this deficit, thus those with hearing loss would have more adept vision. Most and Michaelis' study did not support this because those children with hearing loss performed better on the auditory-visual condition than just the visual condition. In fact their results show that normal hearing children and children with hearing loss perform equally well at perceiving emotion in the visual only and auditory only conditions (2012). Across all conditions participants were most accurate in perceiving happiness. Most and Michaelis also found that in the auditory condition participants with normal hearing as well as those with hearing loss most often confused sadness with fear and anger with happiness (2012). "Perception of nonverbal information in the spoken communication process, such as the speaker's emotional state with respect to the topic or the listener, is crucial for understanding social interaction" (Most & Michaelis, 2012) Although this confusion

occurred in both groups, those with hearing loss confused these emotions more commonly than those with normal hearing. This study suggests that children with hearing loss have more trouble correctly identifying emotions overall suggesting that auditory and visual cues are both important in emotion perception.

Dyck and Denver (2003) assessed the possibility that emotional recognition can be enhanced in deaf children through emotional recognition training. The program attempts to increase deaf children's emotional vocabulary, their ability to use these terms to communicate, their ability to understand nonverbal emotional cues, and their ability to understand how emotions influence behavior. Children participants had different amounts of hearing loss. Dyck and Denver administered emotional recognition scales including a fluid emotions test, a comprehension test, which assessed understanding of emotional consequences, and an emotional vocabulary test before and after the program to assess improvement. Dyck and Denver found that children with more severe hearing loss perform worse on the comprehension pretest than those with less severe hearing loss. After the children completed the program Dyck and Denver found that children with hearing loss showed a greater emotional vocabulary and ability to understand emotions, but found no increase in speed of emotional recognition or accuracy of emotional recognition. The results of the study suggest that programs, such as the one used in this study, can enhance certain aspects deaf children's emotional understanding. This study is important because it addresses the possibility that those with hearing loss could eliminate some of the emotional deficits that come with hearing loss, which in turn could increase social and communication skills. Because of the limitations of Dyck and Denver's study, such as lack of

a control group and a small sample size, future studies should continue to replicate and expand on the current findings to assess this possibility in greater depth.

In another study, Hosie, Gray, Russell, Scott, and Hunter (1998) assessed possible deficits in recognizing and comprehending facial expressions in deaf and hearing children. Hosie et al. suggested that because deaf children grow up without being able to hear references to emotions in conversation they may have a harder time understanding and reading emotional expression in others. Hosie et al. asked two groups of children participants to match photographs of facial expressions of emotion, as well as label the emotional expression, and explain the expression to show comprehension. Hosie et al. included all six of the universal emotions in the study, which includes happiness, sadness, fear, anger, disgust, and surprise. One group had normal hearing and the other group had hearing deficits. Hosie et al. found that deaf and hearing children had similar recognition abilities meaning that between these two groups there was not a significant difference in their ability to match the emotional expression photographs and comprehend what they meant. They only found differences in deaf and hearing children's abilities to recognize fear and disgust. Hosie et al. found that deaf children were actually better at reading these emotions than were hearing children. Hosie et al. also found that older children performed better then younger children on all of the tasks. This finding suggests that as children age and experience more emotional interaction with others they become better at reading these expressions. A limitation of this study was the facial expressions in the photographs being clear and distinctive, which makes it difficult to determine whether or not deaf children are able to interpret facial expressions in everyday conversation where expressions are constantly changing and may not be as clearly displayed. However, Hosie et

al. suggested that one possible reason that their results show deaf children being comparable in their ability to read emotional expression is that, despite the deficits that come from not being able to hear, they rely more on nonverbal cues than do hearing children, which may close the gap in ability between the two groups. This study did provide evidence that even though there are differences in how dear and hearing children experience communication, which changes their social interactions they may experience emotional expression in a similar way. Hosie et al.'s findings may provide implications for the possibility of enhancing understanding in deaf children of more complex emotional displays such as shame, guilt, or pride. These results are different from other studies and suggest that more research in the area would be beneficial to more fully understanding the influence of hearing deficits on emotional perception. Matsumoto and Willingham (2009) performed a similar study assessing the affects of blindness on the creation of emotional expression.

One of the problems that may occur with blind individuals is that they do not display emotional expressions as much as sighted individuals. Mirroring others emotions is an important part of understanding how another feels, as well as correctly interpreting their emotional expression. Matsumoto and Willingham (2009) assessed at the spontaneous emotional expressions of congenitally blind, noncongenitally blind and seeing individuals. Matsumoto and Willingham compared the emotional expressions produced by blind and seeing individuals from the Paralympic Games and seeing individuals from the Olympic Games in both males and females. They chose to compare emotional expressions of athletes at these two events because they are generally in similar settings and are extremely emotionally due to the athletes' life investment in their sport. Matsumoto and

Willingham compared emotional expressions that occurred at the end of the judo matches,

as well as when awarded their metal, and when standing on the podium with the other

winners. Photographers took photographs of the athletes' faces for Matsumoto and

Willingham to code for emotional expression. They expected winners to display genuine

smiles, and defeated athletes to display emotional expressions of sadness. Matsumoto and

Willingham found no difference between spontaneous emotional expressions of the seeing,

the congenitally blind, and the noncongenitally blind athletes. However, Matsumoto and

Willingham found that blind athletes did show greater facial movement than seeing

athletes at the completion of the match, and upon physically receiving their medal.

Matsumoto and Willingham's results suggest that blind individuals can still learn and still

use emotional expression even though they cannot learn to use these through observation

like seeing individuals. Because of this blind individuals may not experience large deficits

in understanding and reading another's' emotions despite their lack of observational

learning from a young age. This ability in blind individuals may make it easier to interpret

or understand how another is feeling despite not being able to see the individuals face

because they can mirror the emotion themselves and thus 'feel' what the other is feeling. As

in Hosie et al.'s (1998) study, Matsumoto and Willingham's results indicate that more

research needs to be done in the area to more fully determine if blind and deaf individual's

ability to read and understand other's emotions are inhibited by these deficits or if they

don't hinder as much as other studies such as Dyck et al.'s (2004) study.

Irv the Internet Man
By: Jeffrey Angera and John Littrell

Irv came in for counseling because he was having relationship problems with his wife and family. Irv's wife asked him to move out and filed for divorce on account of his addiction to the Internet, spending too much money and impulsive buying, binge eating, quitting his job, and developing online relationships with strangers. Irv was also having difficulty sleeping. One of the reasons that Irv explains he was making connections and developing relationships online with strangers was that it was easy for him because he didn't fear judgment and rejection from those online. In his online interactions Irv had multiple personas including a man with greater sex appeal than he felt he had, and a woman. The counselor noted that during counseling Irv did not make eye contacts during sessions. At the end of Irv's counseling sessions he reported improving relations with his family and wife. Irv was sleeping much more normally, started working again, and was spending time with his family. For example he went grocery shopping with his wife for the first time in 20 years and started eating dinner with the family again. Irv had not used the Internet since the beginning of the counseling sessions, and was making much better eye contact. At his 6 month check up Irv reported that he continued to work on not shutting out his family and was actively trying to communicate with them. Because of this he felt that these relationships had improved significantly. Irv still had not been on the Internet, his business was up and running again, and he lost 50 pounds.

When individuals establish relationships in an online setting they have the opportunity to lie about their appearance. This also keeps the two individuals from seeing the other's expressions of emotion when they first meet. Emotional expression may be stifled by this online interaction making an individual's first impression of another completely different than if they met outside of the cyber world. Toma, Hancock and Ellison (2008) explore how accurately individuals represent themselves on online dating profiles. Irv's case study fits well with Toma et al.'s study because he creates online profiles of himself that embody a number of different personas. Irv seems to use this as an escape from the problems in his actual life and this causes greater problems with his family. Toma et al. explain that because people have time to respond to any online interaction they may respond differently than they would in a face-to-face interaction. This may conceal initial emotions that provide clues into who they are and how they respond to situations. Online

interactions eliminate a large amount of the emotional piece of communication. "These features of computer-mediated communication facilitate selective self-presentation and prevent potentially undesirable nonverbal cues from being expressed" (Toma et al., 2008). In Irv's case the Internet allowed him to portray himself as a more attractive male and even as a women. The internet proved to be a screen with which Irv could hide many of his undesirable traits that would have been very clear in a face to face encounter. Another issue that arises with online interactions is that individuals may have a harder time detecting deception because of the lack of emotional cues. While people are not necessarily great at detecting lies, there are still more cues provided in face-to-face interaction than online interaction. Toma et al. compared the actual characteristics of individuals compared to their profile descriptions of themselves. Toma et al. found that the innacuricies found were intentional instances of deception because the topics that individuals lied about were consistent across participants. For example Toma et al. found that women lied more about weight while men lied more about height. In face-to-face interaction these lies are not as convincing and are harder to maintain. "The reduction of communication cues, especially nonverbal and visual cues (with the exception of photographs), spares online daters some of the common predicaments faced by traditional daters trying to make a good first impression. While deciding how to present themselves in their profiles, online daters do not have to worry about their apparel or body language, or about saying the right thing at exactly the right moment" (Toma et al., 2008). Future work assessing the implications of the lack of emotional expression that occurs through online interaction could give a more in depth picture of what inaccuracies people use and what problems people may have interpreting another's emotional expressions. For Irv the Internet provided an outlet that

made his relationships with his family much worse and allowed him to close himself off emotionally from his family causing even more problems in his life. The deception that can occur on the Internet, and the lack of emotional perception that can occur when not interacting with another individual face to face is important to take into account in a day and age where dating sites are becoming more popular and the internet continues to be an outlet for social interaction.

Rosen, Cheever, Cummings, and Felt (2008) analyzed the impact of emotional expressiveness and self-disclosure in an online dating context in comparison to more traditional in person dating. Rosen et al. examined the possibility that more emotionally expressive words might mirror more visually emotionally expressive individuals in person expressions. Thus, those individuals who are more emotionally expressive in person may transfer this expressiveness to their online communication style by including more strong emotional words. Those in communication with a more emotionally expressive person are required to perceive the other's emotionality using only words, whereas, in traditional dating other nonverbal and verbal cues are used to interpret another's emotions. This study attempts address the question of what people can perceive about another from writing style. Rosen et al. contend based on previous research by Ben-Ze-ev (2003) that some emotions, such as shame, may even be absent from cyberspace because of how difficult it is to express these emotions without the use of visual nonverbal and auditory cues. The higher use of early self-disclosure may be an attempt to make up for missing emotional cues that are present in face-to-face communication. Rosen et al.'s studies assessed behavior of people who participate in online dating, and the differences between them and traditional daters, as well as the affects of level of expressed emotion and self-

disclosure on first impressions (2008). Rosen et al. hypothesized that emails using higher

emotional expressivity would be rated more positively and that greater self-disclosure

would also be seen more positively. Rosen et al. asked participants about their use of email

and online dating, and then about their friends' use of these technologies, and also had

participants read fictitious emails and rate them on a number of dimensions, such as

willingness to date the individual writing the email, and how positively they felt about the

email writer. Thus, participants were judging the person based solely on their perceptions

that they gained from the email. Participants who selected the more emotionally expressive

email writer described him as more outgoing, confident, and confident among a number of

other positive adjectives. Rosen et al. found that use of stronger emotional words were

generally responded to more positively than those who did not use as strong of emotional

words (2008). They also found that participants who were online daters generally

preferred those who disclosed less than traditional daters who preferred individuals who

disclosed more. Traditional daters also focused on personality and personal information

gathered from self-disclosure more than online daters who emphasized communication

techniques and judgments of attractiveness if pictures of the individual were available.

Rosen et al. asked participants to make judgments of people without ever seeing or

interacting with them. In this day and age perceptions of others are developed without any

or minimal visual cues that accompany interactions such as the individuals facial

expressions, or their nonverbal cues. The visual cues generally used when perceiving

another's intent are missing from these forms of communication. Online dating is an

increasing phenomenon that will continue to affect the future of relationships. This calls for

more research in the area to help develop a broader understanding of what deficits arise, if

any, from a lack of visual cues that aid in the perception of emotion, and if the impressions people develop online affect meeting in person. Rosen et al. suggest that perhaps those who already communicate a significant amount online are already developing ways to gain similar impressions to those that are gained from in person interaction.

Application

The last section of this paper will address the possible clinical applications that can be gained from the study of the perception of emotion. Empathic accuracy refers to the ability to accurately read others thoughts and feelings and is also an important aspect of emotional intelligence (Mast & Ickes, 2007). As with IQ, emotional intelligence is a continuum. Empathic accuracy also plays an important role in displaying empathy. Mast and Ickes' article addressed the many different ways that empathic accuracy is measured and some of the clinical applications to accompany research results on this topic. In many studies, such as a number addressed in the current paper, two individuals are videotaped. One form they mention is an unstructured format, such as the when the researcher suddenly leaves the two participants alone together. In these cases participants did not previously know each other. Another videotaping procedure Mast and Ickes mention includes structured conversation, such as when couples discuss a conflict in their relationship, or when a number of participants have a group therapy session with a counselor. In all cases participants subsequently watched the tape and recorded their thoughts and feelings at certain times and then watch the other participant's and record as a perceiver. Mast and Ickes suggest that the validity of these types of studies is high and indicate that people who know each other are more empathically accurate when reading each other than when reading strangers (2007). The clinical implications of these findings

are relevant for client-therapist relationships as well because counseling of all types is

generally more successful when the counselor or therapist is good at reading their clients'

emotions (Mast & Ickes, 2007). Mast and Ickes also suggest that relative consistency in

humans' ability to perceive others emotions may play a role in the future when selecting

students for graduate schools and professions where empathic accuracy is especially

salient. While empathic accuracy is positive in many situations it can also be negative when

fully understanding another's feelings may cause more damage to a relationship than

inaccurately perceiving feelings, such as during an argument. Inaccuracy may serve as a

buffer for the relationship from the displeasure that conflict brings (Mast & Ickes, 2007).

Studies showed that motivated inaccuracy occurs in threatening conditions; therefore

couples in conflict may be motivated to be less accurate when interpreting the other's

feelings (Mast & Ickes, 2007). This seems to imply that denial and avoidance are sometimes

more effective than being empathically accurate. Motivated accuracy where individuals are

so motivated to interpret their partner's emotions and feelings or look for trouble is also a

damaging possibility (Mast & Ickes, 2007). This could create more problems than it solves.

Empathic accuracy is also a problem for those with disorders such as Autism, and

borderline personality disorder. Studies of empathic accuracy are relevant to many clinical

areas, but should not always be taken at face value. The issues of empathic accuracy and

when it is a good or bad thing are important to take into account. As Mast and Ickes show

empathic accuracy can damage as much as it can help.

Another application of emotional perception research includes the possibility that

people with disorders such as Autism can overcome some of the difficulties that occur from

deficits in emotional perception abilities. Baron-Cohen, Golan, and Ashwin (2009) assessed

the possibility that children with autism can be taught to better recognize the emotional

and mental states of others. Baron-Cohen et al. define empathy as "the ability to attribute

mental states to others, and to respond with an appropriate emotion to the other person's

mental states." Children and adults with autism have trouble using empathy, which creates

barriers to successful communication and interaction in social settings. One of the reasons

Baron-Cohen mention that individuals with autism may have difficulty recognizing emotion

in others is because they have altered face processing and one of the main components of

this is lack of attention directed at the face and to the eyes. The face and eyes are critical to

reading and interpreting another's emotions. Baron-Cohen et al. reviewed a study that had

one group of children participants watch a video every day for a few weeks, a second

group, which served as the control, did not watch the video, and a third group of typically

developing children, which also served as a control group. The video included train

characters with actors and actresses faces as the face of the vehicle. Before and after the

period of video watching each group took tests measuring emotional recognition. The

results of the study showed that those autistic children that did watch the video improved

significantly more in their post-video scores than either control group that did not watch

the video. Baron-Cohen et al. also found that the emotion recognition abilities gained in the

group watching the video generalized to humans. This means that although participants

watched a video with train characters expressing emotion, they were able to use the

knowledge gained from this when recognizing emotion in people as well. Baron-Cohen et

al. discussed the implications of this finding and suggest that emotional recognition can be

taught to those with emotional recognition ability deficits. This would help those with

emotional recognition deficits to be more able to function in social settings and may

improve their relationships with others. Studies in this area are very important because training could help those who experience difficulties in understanding others emotions and because of this experience difficulty relating to them.

Hertenstein, Hansel, Butts, and Hile (2009) examined another interesting piece of application related to the perception of emotion. Hertenstein et al. assessed the possibility that smile intensity in photographs could predict whether or not a couple would get divorced later in life. Hertenstein et al. suggest that the emotional expression of smiling in photographs may serve as a cue of other emotional tendencies during interaction with others. Hertenstein et al. examined individuals' yearbook pictures and their divorce record later in life. Hertenstein et al. recruited participants through email and from pool of alumni of a small Midwestern university. They coded photographs for smile intensity and participants answered a short questionnaire to determine their relationship status. Hertenstein et al. performed a second replication study using a sample from the local community. Hertenstein et al. found that smile intensity was related to divorce where those who smiled less intensely were more likely to be divorced. These results suggest that emotional expressions may be indicative of how people interact socially. More emotionally expressive couples may find it easier to read the other's emotions and thus have more open communication. "One's facial expressions shape and forge the environment in which an individual interacts, which should especially include one's more intimate spousal relations" (Hertenstein et al., 2009). While Hertenstein et al. only look at yearbook pictures, which is a small moment in time they predict that these photographs are representative of individuals stable emotional tendencies. Hertenstein et al. suggest from the findings that personality,

which is closely tied to emotional tendencies shapes interactions between those in close

relationships.

Kleef, Anastasopoulou, and Bernard (2010) examined individual's epistemic

motivation or individuals desire to accurately interpret another's emotional expression and

thus gain understanding of the situation. "Emotional expressions can also influence

observers' behavior by providing relevant information and triggering inferential

processes" (Kleef, 2009). Kleef et al. found that individuals with high epistemic motivation

were more fluent, flexible, engaged, and more original after another individual expressed

angry feedback as opposed to neutral feedback. These findings suggest that individuals

with high epistemic motivation may be more responsive in different ways to expressions of

emotion such as anger. This may transfer to other emotions, making those high in

epistemic motivation more able to read and understand other's emotions. "For example, an

expression of anger signals dissatisfaction, frustration of goals and a need for change"

(Fischer & Roseman, 2007).

Social anxiety may make individuals pay more close attention to facial expressions

than those without social anxiety because these expressions serve as a cue to negative

evaluation. Hunter, Buckner, and Schmidt (2009) explored the possibility that socially

anxious individuals may be more accurate at identifying threatening facial expressions

because they pay more close attention to them. Because people who experience social

anxiety are worried about what others think of them they may be prone to paying closer

attention to threatening emotional expressions that may indicate another's negative

evaluation of them. Individuals with little or no social anxiety may not be as aware of these

negative emotional expressions because they are not as worried about negative evaluation.

Hunter et al. recruited participants from an undergraduate university and had them fill out

self-report measure of social phobia, anxiety, and depression. Following this participants

performed tasks measuring recognition of emotional expressions. Hunter et al. found that

socially anxious participants were actually better at identifying emotional expressions than

those who were not socially anxious, and were especially good at identifying fear,

happiness, and sadness. Hunter et al. predicted that happiness may be interpreted by the

socially anxious as mocking, which would make it important to pay attention to in addition

to fear and sadness. This finding suggests that while socially anxious individuals are better

at identifying facial expressions they may not always be accurate when interpreting what

these expressions mean.

The possible applications discussed in this section demonstrate the variety of

research in the area and the wide array of ways this information can be used and applied to

everyday life.

Conclusion

The research in this area indicates that there are a number of factors that affect

emotional communication and perception in relationships. It is important to keep in mind

that many factors influence communication and perception of emotion, which may

influence the counseling process. This can help current counselors when they are

attempting to understand what is going on with a patient. Being able to use facial

expressions as cues to the counselor of what is going on within a close relationship may

provide insight into how the issues at hand can be solved or improved upon. In this sense

the counselor can use cues as well as those actually in the relationship. Raising awareness

of all these factors may also impact everyday communication in close relationships because

individuals will more fully understand all the complexities that accompany this
communication.

Future studies should expand on the current research to identify how the biases in
emotional perception influence communication with modern day technology. Technology is
changing so rapidly and the influence of all these new technological forms of
communication may heavily impact emotional perception through these mediums. With
the possibility of rising instances of online schooling, working from home, and even online
and long distance dating, issues of emotional communication and accurate perception arise.
However, with technology also comes the benefit of being able to combat difficulties that
individuals experience with deafness, blindness, or even autism. Future research should
look to explore the negative and positive influences technology will have on humans'
emotional communication and perception. Another question that may be answered by
future research surrounds the impact of the patient reading the counselor's emotion or lack
of emotion and what impact the counselor expressing emotion or lack of emotion has on
the patient. Because emotional expression form of self-disclosure it may be more beneficial
for the counselor to express emotion during sessions.

With all of the different relationships that individuals have throughout their lifetime
the impact of emotional perception is key to understanding how individuals function
together in society. As an extremely social group humans can benefit from knowing more
about how individuals communicate and what influences the emotional aspects of
communication.

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