

**THE INFLUENCE OF TYPE AND DEGREE OF EMOTION EXPRESSED BY VICTIM  
AND RELATIONSHIP TYPE BETWEEN VICTIM AND SUPPORT PROVIDER ON  
THE PROVISION OF SOCIAL SUPPORT**

by

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Submitted to the Graduate Faculty of  
Arts and Sciences in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy

University of Pittsburgh

2006

UNIVERSITY OF PITTSBURGH  
FACULTY OF ARTS AND SCIENCES

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Katrina L. Cooper, Ph.D.

Research on social support has produced conflicting results concerning the role that emotional expression by the victim plays in the process. The current study sought to clarify the role played by the type and intensity of the emotion displayed by the victim, and the relationship type desired by the potential support provider. Participants interacted with confederates displaying low, medium or high levels of either sadness or anger after they had been induced to desire either a communal or exchange relationship. Emotion type and relationship type influenced a number of support variables. The effects of emotional intensity were more ambiguous. Results suggest that a more holistic view of support processes is needed to more fully understand social support.

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## ACKNOWLEDGMENTS

Just as no man is an island unto himself, no dissertation is written by one person alone. Instead, many contribute to the final product. I would like to thank all of those who helped me to create this final product. First, thanks to my dissertation advisor, Martin Greenberg, who suffered through just as many drafts as I did and whose steady guidance has nurtured me through my graduate career. Also, thank to my committee members, Drs. Moreland, Feeney and Klein, who offered valuable assistance and insights in making this project the best that it could be. Also, thank you to Peggy Clark, for her inspiration and encouragement with this project.

On the personal side, I must thank my friends, Jamie, Debbie, Thomas and Jenn, for their support. Thank you for listening to me go on and on and offering me both verbal and nonverbal support. Also, I must thank the wonderful undergraduates who assisted on this project and made life bearable in the process of gathering data. Thanks to Laura, Kim, Tami, Kristina and Will.

Last, but certainly not least, thanks to my terrific family, without whom I would not have been able to do this at all. Thank you to Mom and Pa for lightening my load and providing real, home cooked meals. And a special thank you to Erika, for understanding when my focus was on “dissertating” and for putting up with my periodic outbursts of German. I certainly couldn’t have done this without any one of you!

## 1.0 INTRODUCTION

Each day, we are confronted with a variety of stressors. These range from the mundane (e.g., disagreements with co-workers) to the extraordinary (e.g., finding out that one's child has a terminal illness). In order to cope with this array of stressful situations, we often turn to others in our social networks for support. Social support can provide us with a multitude of benefits, from the strengthening of social network ties (Albrecht, Burleson, & Goldsmith, 1994; Burleson & Samter, 1990; Burleson, Albrecht, & Sarason, 1994; Collins & Feeney, 2000; Feeney & Collins, 2001; Haas, 2002; Harvey & Wenzel, 2002; Leatham & Duck, 1990; Neff & Karney, 2004), to improved physical health (see Berkman, Glass, Brissette, & Seeman, 2000; Burleson, Albrecht, & Sarason, 1994; Helgeson & Cohen, 1996; Thoits, 1995; Uchino, Cacioppo, & Kiecolt-Glaser, 1996 for reviews), to improved mental health and psychological outcomes (e.g., Kurdek, 1988; Major, et al., 1990; for reviews see Albrecht, Burleson, & Goldsmith, 1994; Berkman, Glass, Brissette, & Seeman, 2000; Burleson, Albrecht, & Sarason, 1994; Helgeson & Cohen, 1996).

Despite the many benefits provided by social support, individuals facing stressful events frequently report that they do not receive the social support that they desire (e.g., Silver, Wortman, & Crofton, 1990). Researchers have examined several possible causes of this lack of support. A number of researchers (e.g., Mansfield, Koch, & Gierach, 2003; Martensson, Dracup, & Fridlund, 2001; Coyne & Downey, 1991; Coyne, Wortman, & Lehman, 1988) suggest that

prospective support providers vary in their skills and abilities to provide adequate support, and that these qualities determine whether support is provided or not.

Much of the research examining the determinants of social support has focused on such individual differences and qualities of the support provider. The circumstances of the support-seeker have received less examination in the literature (for an exception, see Westmaas and Silver, 2006). It is known, however, that support-seekers do indeed influence the amount and kind of support that they receive.

For example, the type of emotion displayed by the support seeker (e.g., Steers-Wentzell & Greenberg, 2005; Yee & Greenberg, 1998), the intensity of the emotion displayed by the support seeker (Aune, Aune, & Buller, 2001; Coates, Wortman, & Abbey, 1979; Dovidio, Piliavin, Gaertner, Schroder, & Clark, 1991; Hobfoll & Lerman, 1988, 1989; Trobst, Collins, & Embree, 1994), and the type of relationship shared between the support seeker and support provider (Clark, Ouellette, Powell, & Milberg, 1987; Williamson & Clark, 1989; Yee & Greenberg, 1998) all have been shown to influence how much social support is offered. The purpose of the current study is to examine how these three variables interact to determine the social support provided to a victim, as well as to propose and test possible mediators.

First, I review research concerning the role of emotional expression, including both the type and intensity of the emotion, in the support process. Then, I review research demonstrating that individuals vary in their supportiveness dependent upon the type of relationship they share with the needy individual. Next, I discuss possible interactions between emotional expression and relationship type. Different types of emotion and degrees of emotional expression should have different effects, depending upon the relationship context in which such expressions occur.

Finally, an experiment elucidating how emotions and relationship type impact social support provision is described.

## **1.1 EMOTIONAL EXPRESSION**

The social functions of emotions were recognized long ago (Darwin, 1872/1998), and remain of interest to researchers. Current emotion theorists suggest that, at a dyadic level, the expression of emotion serves several functions (Keltner & Haidt, 1999). One of these functions is to provide individuals with insight to another's emotional state, their beliefs, and their intentions. Emotional displays can also encourage or deter our social behavior (Keltner & Haidt, 1999).

Several researchers suggest that emotions are inherently social processes (e.g., De Rivera, 1984; Miceli & Castelfranchi, 2003; Miller & Leary, 1992). For instance, Miceli and Castelfranchi (2003) demonstrated how crying, an overt expression indicating several emotional states, communicates frustration and/or the perceived helplessness in dealing with such frustration. Additionally, Miller and Leary (1992) present the case of embarrassment as a uniquely social emotion. Embarrassment, and the subsequent expression of embarrassment, only occurs in situations involving the real or imagined presence of others. They suggest that embarrassment displays (e.g., blushing, decreased eye contact, presence of a "mirthless silly smile") serve as communication to others that the embarrassed individual is aware of and regrets the transgression that triggered the embarrassment. In this way, emotional displays signal internal dialogues.

Further, the selective expression of emotion can serve as a social influence technique (Clark, Pataki, & Carver, 1996; Frijda, 1989). Emotional displays can be used to ingratiate,

intimidate, and self-promote (Clark, Pataki, & Carver, 1996), as well as to evoke attention, sympathy, appeasement, or submission (Frijda, 1989).

It seems likely that the emotional expressions of the distressed, then, would be one way in which individuals could perceive another's need for social support. Both the type of emotion expressed by the needy individual and his or her degree of emotional expression have been implicated in the support process. As such, these dimensions of emotional expression are examined next.

## **1.2 TYPE OF EMOTION**

People have lay theories of emotion which help them to explain their own and others' emotional experiences. In their seminal work on such emotional prototypes, Schwartz and Shaver (1987; Shaver, Schwartz, Kirson, & O'Connor, 1987) propose a framework including psychological antecedents of emotion, emotional responses, and self-control procedures for a number of basic emotional states. For instance, the antecedents for sadness include undesirable outcomes, loss, rejection, disappointments, feelings of helplessness and impotency. These antecedents then produce behaviors, cognitions, and physiological responses, including being tired, withdrawing from social contact, speaking in a low, monotonous voice, crying, moping, having a negative outlook, and talking to someone about the sad feelings or event. In addition, Schwartz and Shaver (1987) propose that sometimes people will engage in behaviors such as taking action, suppressing negative feelings, trying to act happy, or looking on the bright side in order to exert self-control over the emotion. Similarly, the anger prototype includes the antecedents of loss of power or control, insult, violation of expectations, pain, or judgment that a situation is unfair or

illegitimate. These might result in an individual cursing, attacking the source of the anger or something other than this source, yelling, complaining, aggression, stomping about, slamming doors, gritting teeth, brooding, and thinking that one's own viewpoint is the only "correct" one. Alternatively, a person might try to restrain expressions of his or her anger by simply suppressing it or by redefining the situation such that anger is no longer appropriate.

Research concerning emotional prototypes demonstrates that individuals readily conform to the emotional prototype when describing fictional or real events involving these emotions (Fitness, 1996; Fletcher & Fitness, 1993; Schwartz & Shaver, 1987; Shaver, Schwartz, Kirson, & O'Connor, 1987). The conclusions of this work imply that individuals have detailed knowledge concerning the antecedents and consequences of different emotions. Thus, an individual in need of social support communicates different needs and instills different expectations in the potential support provider by expressing different emotions.

These expectations, in turn, can influence whether an individual is willing to provide social support to an emotionally distressed other. Research has shown that, within certain parameters, individuals are more likely to offer support to sad and fearful others than to neutral or angry others (Clark, Ouellette, Powell, & Milberg, 1987; Steers-Wentzell & Greenberg, 2005; Williamson & Clark, 1989; Yee & Greenberg, 1998). What might underlie this differential pattern of support?

A potential explanation comes from social-exchange theory (e.g., Thibaut & Kelley, 1959). Social exchange theory is a broad and encompassing theory with strong explanatory potential for a number of social situations. In part, this theory posits that individuals are motivated to maximize their positive outcomes, while minimizing their costs. Witnessing another person in emotional distress can be costly in terms of arousing negative feelings in the witness.

This arousal might motivate helping (Cialdini et al., 1987; Dovidio, Piliavin, Gaertner, Schroeder, & Russell, 1991). However, there may be more costs involved in assisting an angry person than a sad one. Recall that part of the prototype of anger involves aggression and the angry person lashing out. Thus, the costs involved in helping an angry person could be rather high, if the helper is putting him- or herself in a position to become the target of this anger.

This isn't to say that helping a sad person is cost-free. The costs involved with helping someone who is displaying sadness are simply of a different nature. There is documentation that some moods, sadness in particular, have a contagion effect (Coyne, 1976; Hatfield, Cacioppo, & Rapson, 1994; Hale, Jansen, Bouhuys, Jenner, & van den Joofdakker, 1997). Individuals who interact with a depressed other might experience an increase in depressed mood themselves. This mood contagion would be a cost involved with providing support to a sad individual. However, it seems that the risk of "catching" a sad person's depression is not as threatening as becoming the target for an angry person's aggression.

It is important to note that although the mental algebra required to determine whether an interaction's benefits outweigh its costs may be conscious and deliberate, it is also likely that these processes occur automatically and outside of conscious awareness. For instance, Neumann and Strack (2000) demonstrated that mood contagion, which may occur within supportive interactions, need not be a result of conscious perspective taking, but also can occur as the result of an unconscious and automatic process of imitating the individual displaying emotion.

To summarize, different types of emotion serve to communicate different needs to a support provider, and they provide the potential support provider with information concerning the costs of interacting with the emotionally distressed individual. These needs and costs should

influence the support provided, but they are not the only quality of emotional displays that might impact the support process.

### **1.3 DEGREE OF EMOTIONALITY**

In addition to the type of emotion being displayed by a distressed individual, it seems likely that the intensity of the emotional display would also impact the support received. It is reasonable to suggest that an intense display of emotion might serve as a signal of greater need than a medium display; however this does not necessarily mean that an individual expressing intense emotions is likely to be helped simply because they are in greater need.

Existing research is conflicted on this point. Indeed, some research on the impact of emotional intensity on helping suggests that increased levels of distress stimulate greater helping (Dovidio et al., 1991; Hobfoll & Lerman, 1988, 1989; Trobst, Collins, & Embree, 1994). Alternatively, high levels of emotional expression also have been shown to be associated with low levels of assistance (Silver, Wortman, & Crofton, 1990). This latter research demonstrates that supporters experience high levels of discomfort when witnessing another's intense emotional displays, leading them to withdraw from interaction with the distressed.

Again, a social exchange perspective can help to elucidate this apparent conflict. Witnessing another person in distress often invokes reciprocal or empathetic emotions in the observer, and these empathetic emotions can be uncomfortable. In order to relieve the distress caused by these empathetic emotions, observers may offer assistance (e.g., Batson, et al., 1989; Cialdini, et al., 1987; Frijda, 1989). Providing assistance thus alleviates the costs of experiencing empathetic distress. This helps to explain why individuals displaying high levels of distress



receive help from others. However, providing assistance is not the only action that can be taken to alleviate empathic distress. Instead, observers might perceive interaction with a distressed other (and the continuation of empathetic distress or emotional contagion) to be too costly to provide help. In this situation, the observer may withdraw from interacting with the distressed individual in order to minimize costs. Indeed, Silver, Wortman, and Crofton (1990) found that individuals who had the opportunity to interact with cancer patients were less willing to interact with “poor” copers, who displayed a great deal of distress. These same researchers found that “good” copers, who displayed very little emotional distress, were also perceived more negatively than were “balanced” copers, who displayed a degree of emotion, but did not appear to be overly distressed. This further supports the idea that victims of negative life events must walk a very fine line between showing enough distress to elicit support, but not so much as to drive potential supporters away.

Both the type of emotion displayed and the intensity of that display originate in the individual experiencing the negative event. However, both of these variables also imply a target person to whom the emotional state is being expressed. The relationship between the distressed individual and the potential supporter is another variable that might impact the social support process. As such, it is explored next.

#### **1.4 THE ROLE OF RELATIONSHIP TYPE**

In their groundbreaking work on types of relationships, Clark and Mills (1979, 1993; Mills & Clark, 1982) suggest that different types of relationships operate by using different norms. This led to the distinction between communal relationships and exchange relationships. Communal

relationships are those in which benefits are given based on the needs of the partner. One partner tracks and responds to the needs of the other. On the other hand, exchange relationships operate using a norm of reciprocity, in which benefits are given on a cost/benefit basis. Although other relationship types are also proposed (e.g., exploitative), the focus of the current study will remain on differences between communal and exchange relationships.

In the years since the proposition that communal and exchange relationships operate on different norms, much research has been done to demonstrate that these relationships do exist and operate as theorized. It has been established that people in communal relationships do not keep track of the benefits they provide to their partners as carefully as those in exchange relationships do (Clark, 1984; Clark, Mills, & Powell, 1986). In addition, individuals who are led to desire a communal relationship attend more carefully to the needs of their partners than individuals led to desire an exchange relationship (Clark, Mills, & Powell, 1986).

Whereas the partners' needs in communal relationships are the primary focus, and the potential costs and rewards involved are the primary focus in exchange relationships, it is proposed that helping behaviors involving no tangible rewards, should be observed more readily in communal versus exchange relationships. Indeed, in a study by Clark et al. (1987), this pattern was found. In this study, participants were led to desire either a communal or an exchange relationship with another (fictitious) participant. When participants wanted to establish a communal relationship with the other individual, they spent significantly more time helping the other than participants who wanted to establish an exchange relationship. Not only have individuals been found to spend more time helping a potential communal partner, but they also have been found to experience an increase in positive mood when allowed to help the potential

communal partner (Williamson & Clark, 1989). These studies provide evidence that the type of relationship that a person desires to have with another will influence their helping behavior.

In the studies just mentioned, the helping behavior examined was of an instrumental nature. Although it is important to establish that relationship type influences instrumental behavior, it raises the question of whether relationship type would also sway other types of support. A study by Yee and Greenberg (1998) addressed this question. They found that participants led to desire a communal relationship with a burglary victim reported greater intentions to engage in both instrumental and emotional supportive behaviors.

Overall, the research examining communal and exchange relationships suggests that individuals in exchange relationships are focused upon the cost-benefit ratio of helping, whereas individuals in communal relationships are focused on the needs of their partners. When such needs are expressed, help is provided within communal, but not exchange, relationships. This leads to the question of how the support recipient expresses his or her needs in such a relationship context.

## **1.5 INTERACTION OF RELATIONSHIP TYPE AND TYPE OF EMOTION**

As mentioned earlier, the emotional state of a distressed person communicates much about the antecedents to the emotion and the consequent needs of that individual. Researchers interested in communal and exchange relationships have recognized the important role that emotions play in communicating such needs.

Two of the above-mentioned studies manipulated the relationship-target's emotional state as well as the relationship type desired by the participant. In the Clark et al. (1987) study, in

addition to varying whether the participant hoped to develop a communal versus exchange relationship, the researchers also portrayed the potential partner as being in either a neutral mood or in a sad mood. These researchers hypothesized that when participants desired a communal relationship, they would be especially tuned to the needs of the other as indicated by sadness. Thus, individuals in this communal/sad condition were expected to spend the most time helping the potential relationship partner. In addition to the main effect of relationship type mentioned above, there was an interaction between relationship type and emotion expressed by the help-recipient was found in the direction predicted. While individuals desiring a communal relationship with the other helped more than those desiring an exchange relationship, they also engaged in helpful behavior for even longer periods of time when the other expressed sadness.

Yee and Greenberg (1998) also manipulated the emotion expressed by a fictitious burglary victim. In addition to the findings concerning relationship type reported above, participants indicated more supportive intentions toward sad and fearful victims in comparison to victims who expressed anger or who did not express a specific emotion. Although there were no interactions between desired relationship type and emotion displayed by the victim on intentions to provide support, such interactions were found for the participants' perceptions of the victim's needs and their perceptions of costs involved with helping the victim. Participants who were led to desire a communal relationship perceived victims as having greater needs. This was particularly true when the victim expressed sadness or fear in response to the burglary. Likewise, participants who wanted an exchange relationship with the victim estimated the costs of helping to be higher than those who wanted a communal relationship, but only when the victim expressed sadness or when no information concerning the victim's emotional state was available.

Taken together, the two studies that examined the impact of both relationship type and type of emotion expressed (Clark et al., 1987; Yee & Greenberg, 1998) suggest that individuals desiring a communal relationship are more attuned to the needs of their potential partner as communicated by emotion than are those who desire an exchange relationship. In exchange relationships, individuals tend to focus on the costs-benefits ratio, and thus may perceive the costs of helping as high, which inhibits helping behaviors. Both studies, however, focused solely on the *type* of emotion being displayed, and not the *level* of emotional expression. How might relationship type and the degree of emotionality work together to determine social support?

## **1.6 INTERACTION OF RELATIONSHIP TYPE AND DEGREE OF EMOTIONALITY**

While the research presented above provides evidence that the type of emotion displayed interacts with the type of relationship desired by an individual to determine helping behavior, it does not address the impact of the magnitude of the emotional display. Other lines of research, however, do attend to the implications of showing various levels of emotion within communal versus exchange relationships.

For example, Clark and Taraban (1991) found that individuals within communal relationships showed a preference for discussing more emotional topics when compared to those in exchange relationships. Additionally, Clark and Brissette (2000) propose that displaying emotions is viewed as more appropriate within communal relationships than in exchange relationships. These researchers demonstrated that individuals were much more likely to express

a variety of emotional states in communal relationships, but in the context of exchange relationships, the intensity of these emotional states was likely to be suppressed.

Additional support for the idea of a greater degree of emotion being expressed in communal, but not exchange, relationships comes from a week-long diary study of college students (Feldman-Barrett, Robin, Pietromonaco, & Eysell, 1998). In this study, college students kept track of each interaction lasting more than ten minutes in which they had participated. The participants reported not only experiencing higher intensity emotions when interacting with a close (versus not close) other, but also expressing their emotions to a greater extent with close others.

Overall, the research reviewed here suggests that individuals are more willing to express emotion in communal relationships, and that their emotional experience is stronger in such relationships. There is no research available, however, attesting to how relationship type and degree of emotionality impacts helping behavior. However, based on the theory underlying the distinction between communal and exchange relationships, a greater degree of need (as expressed by a greater degree of emotionality) should promote more helping in communal relationships, whereas the expectations in exchange relationships are not as clear. On the one hand, a high degree of emotionality may be necessary to demonstrate the existence of a need state. On the other hand, a high degree of emotionality might be seen as an inappropriate norm violation in the context of an exchange relationship, thereby discouraging partners from providing assistance. In addition to the question of how emotionality alone interacts with relationship type to impact helping, there remains the question of how the type of emotion displayed might moderate this effect. Might different emotional states expressed at varying

levels of intensity interact with relationship type to impact social support, and if so, how? The current study addresses these questions.

## **1.7 PREDICTIONS AND RATIONALE**

### **1.7.1 Hypothesis 1.**

Communal relationship partners will provide more support than exchange relationship partners. This should emerge in analysis as a main effect of relationship type on social support.

*Hypothesis 1a.* The relationship between relationship type and social support should be mediated more by perceptions of victim need than perceptions of costs for communal partners. However, for exchange partners, both perceptions of victim need and perceptions of interaction costs should mediate the relationship between relationship type and social support.

The reasoning for these predictions is that communal partners should be particularly attuned to the needs of the victims, and this should lead them to provide more support than exchange partners. Exchange partners are aware of the needs of the victim, but also of the costs involved with providing support.

### **1.7.2 Hypothesis 2.**

People should provide more support to sad victims than to angry victims. This should emerge as a main effect of emotion type on social support.

*Hypothesis 2a.* The relationship proposed in Hypothesis 2 should be more strongly mediated by perceptions of victim need than perceptions of costs for sad victims. For angry victims, however, perceptions of costs should mediate this relationship more fully than perceptions of need.

These hypotheses rest upon the assumption that relative to anger, sadness indicates a higher level of need and a lower level of costs for supporters. On the other hand, relative to sadness, expressions of anger indicate a lower level of need (although needs are not completely absent). Thus, needs should have little to no impact on this relationship. However, anger is a much more salient indicator of potential for harm, which is a cost. Therefore, it should be unlikely that individuals will provide as much aid to angry victims as to those who are sad.

### **1.7.3 Hypothesis 3.**

As the intensity of emotional expression increases, communal partners should provide higher levels of social support (i.e., a linear effect), whereas a curvilinear pattern of support is expected with exchange partners. These differing patterns of support should emerge as an interaction between relationship type and emotional intensity displayed by the victim.

This hypothesis is based on the following reasoning: Communal and exchange partners both should become more aware of the victims' distress as the victims' emotional displays increase in intensity. Given this, participants should feel pressure to provide more support. As the emotional intensity of victims increases from medium levels to high levels, however, communal partners should continue to increase the support they provide, while exchange partners should decrease supportive behaviors. Individuals adhering to the communal norm should interpret the increased emotional display as indicating greater levels of need, leading to



increased helping. Individuals adhering to the exchange norm, however, should interpret the increased emotional display as a breach of the exchange norm and as indicating increased costs involved with helping.

*Hypothesis 3a.* Once again, for communal partners, perceptions of victim need should more strongly mediate the above relationship than perceptions of costs. However, for exchange partners, both perceptions of needs and perceptions of costs should mediate this relationship.

The communal norm states that we should react to the needs of our partners. Increased emotional distress should signal an increased need on the part of the victim, leading the communal partner to provide more support. Exchange partners, however, should provide social support when the need is known and the provision of support is not costly. At low levels of emotional intensity, exchange partners will not be aware of the victims' needs and support will be lacking. At medium levels of emotional intensity, the victims' needs should be apparent, and the costs involved with fulfilling those needs should be relatively low. Thus, support should be forthcoming. At high levels of emotion, the intensity of the emotional display may indicate a great amount of need on the part of the victim, but it will also be perceived as a cost to the support provider, leading them to withdraw from the interaction and hence provide relatively little support.

## **2.0 METHOD**

### **2.1 PARTICIPANTS AND DESIGN**

One-hundred seventy-one females participated in the current study. Participants were told that the study examined how talking about negative events influenced first impressions of others. Each woman participated with one of two female experimental confederates. Each participant was randomly assigned to one of 12 cells in a 2 (relationship type: communal vs. exchange) x 2 (emotion type: sadness vs. anger) x 3 (emotional intensity: high vs. medium vs. low) design. Of these participants, 11 were omitted due to suspicions of the procedure. Additionally, three other participants were omitted. One had participated in the pilot work for the main study and was thus ineligible to participate in this study; one acted as a confederate in an unrelated research study and recognized the use of confederates; and another was omitted due to technical malfunction while showing the stimulus tape. Omitted participants did not differ from nonsuspicious participants in any obvious way.

Of the 158 participants included in the study, 79.1% were Caucasian, 12.7% were African-American, 3.2% were Asian, and 5.1% classified themselves as “Other.” The mean age of participants was 19.55 years old. Finally, 36.7% indicated that they had been in a situation similar to the divorce scenario used. This latter group did not display systematic differences on any variable compared to the participants who did not experience a similar situation.

## **2.2 EXPERIMENTAL CONFEDERATES**

Two Caucasian female students (ages 19 and 21) acted as experimental confederates. Both confederates were provided with scripted responses for a simulated interview session that was used as the emotion manipulation (see below). In addition, confederates were given scripted answers for questions that the participants were likely to ask during the interaction. An extensive training period ensured that both confederates were able to maintain the emotional state and intensity portrayed in the videotaped “interview” throughout the interaction with the participant.

## **2.3 MATERIALS**

The manipulation of relationship type was accomplished by providing participants with a “Background Information Questionnaire,” which the confederate had ostensibly completed. This questionnaire asked the confederate why she chose this particular experiment. In the communal condition, participants read that the confederate chose this experiment because “It looked interesting. Also, I just moved to Pittsburgh, so I thought it would be a good way to meet other people. I wanted to talk with someone rather than just sit in front of a computer.” In the exchange condition, participants read that the confederate chose this experiment because, “It looked interesting. Also, my boyfriend was able to pick me up afterwards. I wanted something that would fit in my schedule between classes and work, and this one fit.” This type of manipulation has been shown to be effective in the past (Clark, 1987).

The manipulation of emotion type and emotional intensity was accomplished through a prerecorded videotaped “interview” between the researcher and the confederate. The basic script

used for this interview can be found in Appendix A. The script varied the words used to describe the confederate's emotional reaction to her parents' divorce. In the high-sad condition, confederates used the words, "miserable" and "so helpless" to describe how they felt upon hearing about the divorce. In addition, confederates stated that they "couldn't stop crying" and also displayed many nonverbal cues for a high magnitude of sadness, such as averted gaze, sighing and a soft voice. In the medium-sad condition, confederates used the words, "sad" and "kind of helpless" to describe their emotional state. They also used nonverbal cues of sadness. In the low-sad condition, confederates claimed to be "unhappy" and "unsure what to do." Nonverbal cues for sadness were not used, but speaking voice was still low. In the high-angry condition, confederates used the words, "pissed off," "unfair," and "furious." They indicated that they threw the phone across the room after receiving the phone call about the divorce. They also used nonverbal cues of anger, such as direct gaze and loud voice. In the medium-angry condition, confederates claimed to be "angry" and "frustrated." They again used nonverbal anger cues. In the low-angry condition, confederates used the words "annoyed" and "bothered" to describe their emotional state. They did not use nonverbal anger cues, but kept their tone of voice slightly louder than normal.

### **2.3.1 Pretesting of Materials.**

All materials were pretested to ensure their effectiveness. Fifty-seven undergraduates participated in the pretesting sessions. Each undergraduate was given a background information sheet, supposedly about another participant from an earlier session. These background information sheets served as the communal/exchange manipulation. Individuals read about a student who participated in the experiment either for the communal or exchange reasons outlined

above. Each participant also viewed, in random order, all 12 video tapes that were created for this study. They responded to 17 Likert scales ranging from 1 to 7 (see first part of Appendix B) measuring their impressions of the confederates for each videotape.

After receiving the questionnaire with the relationship type manipulation, participants were asked to complete a brief questionnaire to ensure that they had read and understood the “Background Information Sheet” and to measure their impressions of the other supposed participant. This questionnaire included Likert scales ranging from 1 to 7 measuring participants’ ratings of how close they felt to that person, how close they would like to feel to that person, and how concerned they would be if that person discussed a negative event. These items did not form a cohesive scale (Chronbach’s  $\alpha = .57$ ).

To test the effectiveness of the relationship type manipulation, means for the communal and exchange conditions were compared to the midpoint of the scales assessing how close participants felt and how close they wanted to feel to the victim. In terms of how close participants felt to the participant, there was a marginally significant relationship showing that those in the communal relationship reported that they did want to feel closer to victims than the midpoint of the scale ( $M = 4.57$ ),  $t(28) = 2.01$ ,  $p = .054$ , but they did not report actually feeling closer to victims than the midpoint of the scale ( $M = 3.96$ ),  $t(28) = -.14$ ,  $p = .89$ . In the exchange condition, participants did not differ from the midpoint of the scale in terms of how close they wanted to feel to participants ( $M = 3.86$ ),  $t(29) = -.61$ ,  $p = .55$ , but they did fall significantly below the midpoint of the scale in terms of how close they felt to the victim ( $M = 3.24$ ),  $t(29) = -2.81$ ,  $p = .009$ . These results were mixed in terms of how effective the relationship type manipulation was.

An independent samples t-test was conducted to determine whether the relationship manipulation was effective when the communal and exchange conditions were compared to each other. These revealed that participants felt closer to the communal target ( $M = 3.96$ ) than the exchange target ( $M = 3.24$ ),  $t(55) = 1.93$ ,  $p = .059$ , and they wanted to feel closer to the communal ( $M = 4.57$ ) than to the exchange ( $M = 3.86$ ) targets,  $t(55) = 1.96$ ,  $p = .055$ .

All pretest participants viewed all videotaped interviews used in this study. After viewing each tape, participants were asked to rate the confederates on a series of Likert scales ranging from 1 to 7 to assess the degree of anger and sadness displayed.

One sample t-tests were used to determine if the various emotional intensity conditions were significantly different from the midpoint of four. In the sad conditions, falling above the midpoint of the scale were the low ( $M = 4.95$ ),  $t(55) = 6.76$ ,  $p = .000$ , medium ( $M = 5.81$ ),  $t(56) = 15.69$ ,  $p = .000$ , and high ( $M = 6.35$ ) levels of emotion,  $t(56) = 23.49$ ,  $p = .000$ . In the angry condition, those viewing the low ( $M = 4.53$ ),  $t(56) = 3.04$ ,  $p = .004$ , medium ( $M = 5.87$ ),  $t(56) = 14.20$ ,  $p = .000$ , and high ( $M = 6.35$ ),  $t(56) = 21.27$ ,  $p = .000$  levels of anger also perceived them as falling above the midpoint of the scale.

Paired sample t-tests were used to determine if various conditions were significantly different relative to each other. A comparison of the high-sad and medium-sad condition showed that, as expected, participants rated the high-sad victims as more sad ( $M = 6.35$ ) than the medium-sad victims ( $M = 5.80$ ),  $t(56) = 5.50$ ,  $p = .000$ . Likewise the medium-sad victims ( $M = 5.81$ ) were perceived as being more sad than the low-sad victims ( $M = 4.95$ ),  $t(55) = 6.65$ ,  $p = .000$ . The high-angry victims ( $M = 6.35$ ) were also perceived as angrier than the medium-angry victims ( $M = 5.87$ ),  $t(56) = 4.94$ ,  $p = .000$ . Similarly, the medium-angry victims ( $M = 5.87$ ) were

perceived as displaying more anger than the low-angry victims ( $M = 4.53$ ),  $t(56) = 8.50$ ,  $p = .000$ .

Despite the somewhat problematic nature of the manipulations, practical considerations required that the study be conducted. The confederate training process for this study was a large time investment, and confederates were only available for one year to run subjects.

### **2.3.2 Comparison of Confederates.**

It was also important to determine whether the confederates in this study gave roughly equivalent performances in respect to the emotions displayed. Therefore, a series of paired-sample t-tests were conducted to determine whether the confederates were displaying equal levels of emotion within each emotional level.

Comparing confederates in the high-anger condition, Confederates 1 and 2 were found to be displaying similar levels of anger, ( $M$ 's = 6.25 and 6.46 respectively),  $t(56) = -1.47$ ,  $p = .147$ . Similar results were found for the medium-anger condition, ( $M$ 's = 5.81 and 5.93, respectively),  $t(56) = -.68$ ,  $p = .499$ . In the low-anger condition, Confederate 1 ( $M = 4.40$ ) was again found to be displaying the same amount of anger as Confederate 2 ( $M = 4.65$ ),  $t(56) = -1.18$ ,  $p = .243$ .

However, in the high-sad condition, Confederate 1 was seen as showing more sadness ( $M = 6.53$ ) than Confederate 2 ( $M = 6.18$ ),  $t(56) = 2.26$ ,  $p = .028$ . Similarly, in the medium-sad condition, Confederate 1 was again seen as more sad ( $M = 5.95$ ) than Confederate 2 ( $M = 5.65$ ),  $t(56) = 2.25$ ,  $p = .028$ . Finally, in the low-sad condition, Confederate 1 was also perceived as being more sad ( $M = 5.20$ ) than Confederate 2 ( $M = 4.70$ ),  $t(55) = 2.49$ ,  $p = .016$ . Therefore, the factor of confederate was controlled for statistically in all ANCOVAs.

### 2.3.3 Manipulation Checks.

As stated above, all manipulations were tested for efficacy during the pretesting phase. The results of these manipulation checks determined that the manipulations were slightly problematic, but working well enough to continue. In addition, manipulation checks were performed using data provided by participants of the main study.

Two questions were asked in the experimental protocol to determine the efficacy of the communal/exchange relationship manipulation. The first question asked, “How close (friendly) do you feel to the other student?” The second question asked, “How close (friendly) would you like to feel toward the other student?” Both were answered on a Likert scale ranging from 1 to 7. There were no significant effects of relationship,  $F(1, 145) = 2.25, p = .14$ , emotion type,  $F(1, 145) = .78, p = .38$ , or emotional intensity,  $F(2, 145) = 1.98, p = .14$ , manipulation on the first question. The second question, asking how close the participant *would like* to feel toward the confederate, did produce marginally significant effects. Specifically, the relationship type manipulation influenced how close participants would like to feel toward the confederate,  $F(1, 145) = 3.05, p = .08$ . As expected, participants in the communal condition ( $M = 4.79$ ) desired a closer relationship than those in the exchange condition ( $M = 4.47$ ). Participants who interacted with a sad victim ( $M = 4.83$ ) also demonstrated a greater desire for a close relationship compared to those who interacted with an angry victim ( $M = 4.44$ ),  $F(1, 145) = 3.68, p = .06$ .

The success of the emotion type and emotional intensity manipulations was measured by two 7-point Likert-scales. These scales asked participants to rate how angry and sad the confederate seemed to be. A main effect of emotion type on anger ratings was found,  $F(1,145) = 40.43, p = .00$ , such that angry confederates ( $M = 3.92$ ) were viewed as more angry than sad confederates ( $M = 2.39$ ). Additionally, a main effect of emotional intensity was discovered,  $F(2,$



145) = 3.95,  $p = .02$ . Contrasts between the various intensities of emotion were statistically significant,  $p = .02$ . Participants who were in the high intensity condition ( $M = 3.46$ ) rated the confederate as more angry than those in the medium intensity condition ( $M = 3.31$ ), who in turn rated confederates as being angrier than in the low intensity condition ( $M = 2.68$ ). Because this is a main effect, this test examined the effect of emotional intensity on perceived anger for all participants, regardless of emotion type. However, this manipulation check examined only one type of emotion, namely that of anger. When perceptions of anger among those participants who interacted with an angry victim were examined, more support for the emotional intensity manipulation was found. Specifically, Tukey Honestly Significant Difference tests show that the low levels of anger were significantly different from both the medium and the high levels of anger. Perceptions of confederate anger among the medium and high angry conditions were not significantly different, however.

A significant difference was found between participants faced with sad ( $M = 5.16$ ) and angry ( $M = 4.51$ ) victims on perceptions of sadness,  $F(1, 145) = 8.47, p = .004$ . Although contrasts of emotional intensity did not show significant effects on sadness ratings, the means within the sad condition followed the predicted pattern for low, medium and high levels of emotion ( $M$ s = 4.89, 5.07, and 5.54 respectively).

## 2.4 PROCEDURE

The participant and confederate were escorted from the waiting area to the first laboratory. After obtaining consent, a researcher explained that they would be sharing some background information about themselves with each other to help them to start forming their impressions.

The participant was given a blank background information sheet. The confederate was given a completed background sheet that reflected the manipulated relationship type. No participant noticed that the confederate's sheets were already completed. After giving the participant enough time to complete the questionnaire, the confederate and participant were asked to swap papers and read each others' answers. Approximately one minute was given for this task. Upon finishing this task, the researcher explained that either the participant or confederate would be randomly chosen to discuss a recent negative event that she had experienced. A rigged drawing was held, with the confederate being announced as the "discloser." The researcher then explained that people feel more comfortable talking about negative events when one-on-one rather than in a group of three or more. Therefore, the confederate and a researcher would leave the room for an interview about the negative event, and that this interview would be broadcast over a closed circuit television feed. This provided a cover story allowing the researcher and the confederate to leave the room for the interview. The researcher then played the prerecorded videotape for the emotional manipulations appropriate to the condition.

Next, participants were escorted to the "interaction room" where the confederate and researcher were waiting. They were asked to be seated within camera range. Then the participant and confederate were instructed to discuss the disclosure just made. A video recorder was started, and the researcher left the room.

Five minutes later, the researcher re-entered the room and stopped recording the interaction. The researcher explained that the participant and confederate would be separated again in order to ensure privacy while they completed a questionnaire. The confederate was told that she could remain in the interaction room and the participant was escorted to another laboratory room.

Within the participants' questionnaire packets were the manipulation checks mentioned above. Additionally, questions assessed participants' perceptions of the confederates' need for support. As a measure of costs, participants were asked to describe how uncomfortable they felt during the interaction on a series of Likert scales ranging from 1 to 7. An adapted version of the Future Interaction Questionnaire (Coyne, 1976) was included in this packet. This questionnaire asks participants to rate how likely they would be to interact with the confederate in a number of situations. Participants indicated whether they would be willing to return for future experimental sessions with the confederate, and, if so, how many such sessions. Finally, the questionnaire collected demographic information. The entire questionnaire can be found in Appendix B.

## **2.5 CODING VERBAL AND NONVERBAL MEASURES OF SUPPORT**

Two coders were trained to code both the verbal and nonverbal behaviors demonstrated by subjects in the videotaped interactions. A modified version of the supportive communication code developed by Samter and Burleson (1984) was used to code verbal behaviors of the participant. The original Samter and Burleson coding scheme assigns one of 14 codes to each utterance made by the support provider. Statements are classified as being one of five types (acknowledgements, information seeking, disclosure/opinion, advice, and comfort), in addition to being assigned a code signifying the effort level of the statement. However, in this study, all effort level codes were collapsed within each statement category, making the task of coding simpler and presumably more reliable than it has been in the past. Therefore, the current study classified each speaking turn of the participant into one of these five statement-type categories. Acknowledgments included simple acknowledgements that the confederate has been heard (e.g.,

“Uh-huh”), and responsive acknowledgements in which the participant indicated emotional expression along with an acknowledgement (e.g., “That’s terrible”). Information seeking included questions concerning the behavioral features of the situation (e.g., “What did your friends say?”), as well as those probing for psychological information (e.g., “How are you feeling about this?”). Disclosure/Opinion statements are those in which the participant revealed information, opinions, experiences, or her own feelings. Examples include disclosures that are not applied to the current situation (e.g., “My parents are still together, but my best friend’s are”), or those that are explicitly applied to the problem at hand (e.g., “My parents separated when I was eight, and I felt the same way you did”). Advice statements are those that recommend a certain behavioral action (e.g., “I think that you should talk to your parents”), or those that suggest methods of coping centering on emotional or psychological states (e.g., “The people at the counseling center are nice. Maybe you should call”). Finally, comforting statements are those in which the participant either acknowledges the emotional state of the support seeker but makes no effort to help the support seeker to understand them (e.g., “I can tell you’re really upset about this”), or utterances which elaborate on the support seekers’ feelings and try to put them in context (e.g., “I know that you’re really upset right now, but it’s probably better this way”).

The benefit of using this modified version of the Samter and Burleson (1984) scale is that the coding categories are arranged so as to be increasingly person-centered in nature. Such person-centered statements are particularly helpful in social support communications (Burleson & Samter, 1990). Thus, the acknowledgements are viewed as less helpful than the information seeking statements, which are less helpful than disclosures, and so on.

Nonverbal codes included engagement in the conversation, smiling, concerned looks, and scowling/angry looks, glaring, and rolling eyes (all 5-Point Likert-scale ratings). A positive nonverbal scale was created by combining scores for smiling and concerned looks ( $\alpha = .86$ ). A negative nonverbal scale was also created by combining scores for scowling, glaring and eye-rolling ( $\alpha = .95$ ). Verbal coding included all verbal support codes identified by Samter and Burleson (1984). These categories were coded as a count of the number of acknowledgements, information-seeking, disclosure/opinion, advice, and comfort.

Coders were trained by viewing and coding ten videotaped interactions from the pilot work. Inter-rater reliability was calculated from these training sessions. The intraclass correlation for the nonverbal scale data was .84. The intraclass correlation for the verbal data was .89. Once reliability was established, each coder worked independently to code half of the videotaped interactions.

In sum, there were ten measures of social support used in the current study. These ten measures did not combine to form any overall measure of support, although attempts were made to form such a scale. Three of these assessed participants' self-reported willingness to have future contact with the victim (the FIQ, a single item asking participants if they were willing to return, and a single item asking how many future sessions participants would be willing to take part in). The FIQ was developed to serve as an independent scale. The other two questions assessing willingness for future contact did not scale with the FIQ or each other. Additionally, five support variables dealt with verbal forms of support (number of acknowledgments, information seeking statements, disclosures/opinions, advice and comforting statements). This scale, developed by Samter and Burleson (1984), was intended to have five discrete supportive statement categories, so it is not surprising that these did not form an overall scale. The final two

measures were the nonverbal behavior scales assessing positive and negative nonverbal behavior. A number of nonverbal behaviors did combine to produce these scales, so data reduction attempts were successful in this case.

### 3.0 RESULTS

Recall that Hypothesis 1 predicted a main effect of relationship type, such that communal partners would consistently provide more support to victims than exchange partners. Hypothesis 1a predicted that for communal partners, perceptions of victims' need would be a better predictor of support than perceptions of costs whereas for exchange partners, both perceptions of victims' needs and costs should predict support behavior. Hypothesis 2 predicted a main effect of emotion type expressed by the victim such that sad victims would receive more support than angry victims, while Hypothesis 2a predicted that this effect would be mediated more strongly by perceptions of needs for sad victims, but perceptions of costs should be a better predictor for angry victims. Hypothesis 3 predicted an interaction between emotional intensity and relationship type such that communal partners increase supportive behaviors as victims' emotional intensity increases. Exchange partners, however, should provide low levels of support when victims express both low and high levels of emotion, but relatively more support when victims express a medium level of emotion. Hypothesis 3a suggests that this relationship will be mediated by perceptions of victim need only for communal partners, while both perceptions of victim need and costs mediate this relationship for exchange partners.

All analyses discussed below control for confederate through the use of ANCOVA, as confederate differences were discovered in the manipulation checks. There are 10 dependent variables, along with two main effects and one interaction effect of interest. Thus, 30 ANCOVA

analyses were conducted for the primary analyses and only significant results are discussed in this section. Appendix C presents the means for all variables.

### 3.1 HYPOTHESIS 1

Hypothesis 1 predicted a main effect of relationship type on support variables. Of the ten support variables examined, only one yielded a marginally significant effect of relationship type. In terms of positive nonverbal behavior, relationship type had a marginal effect,  $F(1, 141) = 2.91, p = .090$ . As expected, communal partners displayed more positive nonverbal behavior ( $M = 9.06$ ) than exchange partners ( $M = 8.30$ )<sup>1</sup>.

Given the fact that only one support variable, out of the 10 examined, was marginally influenced by desired relationship type, we can conclude that support for Hypothesis 1 is weak.

#### 3.1.1 Hypothesis 1a.

Hypothesis 1a predicted that perceptions of victim need would mediate the above effect for communal partners, and both perceptions of victim need and perceptions of the costs involved with interaction would mediate the effect for exchange partners. The first step in demonstrating mediation is to demonstrate that relationship type predicts the proposed mediators of perceptions of victim need and costs, in the form of participant discomfort. When put into a regression

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<sup>1</sup> Observed power = .40.



equation, relationship type did predict perceived victim need,  $\beta = -.17, p = .032$ , but this did not happen for participant discomfort (i.e., the measure of cost),  $\beta = .07, p = .391$ .

Next, the predictor variable of relationship type must predict the outcome variable of positive nonverbal behavior. The resulting regression equation demonstrated that relationship type was a marginally significant predictor of positive nonverbal behavior,  $\beta = -.14, p = .086$ .

Finally, both the predictor of relationship type and the proposed mediator of perceptions of victim need are simultaneously entered into a regression analysis. In this equation, the proposed mediator, in this case perceptions of victim need, must predict the outcome variable of positive nonverbal behavior. This did not occur,  $\beta = -.04, p = .61$ , therefore mediation is impossible. Hypothesis 1a was not supported.

## 3.2 HYPOTHESIS 2

Hypothesis 2 predicted that participants would provide more support to sad victims than to angry ones. Emotion did influence several support outcomes. Participants who interacted with a sad victim were willing to return for a greater number of future experimental sessions ( $M = 2.86$ ) than those who interacted with angry victims ( $M = 1.75$ ),  $F(1, 145) = 8.92, p = .003^2$ . A similar effect of emotion type displayed by the victim influenced participants' FIQ scores,  $F(1, 144) = 6.30, p = .013^3$ . Participants were more willing to engage in a variety of future interactions with sad ( $M = 23.84$ ) than with angry ( $M = 22.16$ ) victims.

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<sup>2</sup> Observed power = .84.

<sup>3</sup> Observed power = .70

In terms of verbal support, consistent with expectations, participants made more disclosures to sad ( $M = 5.03$ ) than to angry ( $M = 3.96$ ) victims,  $F(1, 142) = 5.08, p = .026^4$ . However, participants made more acknowledgments to angry ( $M = 18.69$ ) than to sad victims ( $M = 14.50$ ),  $F(1, 142) = 9.03, p = .003^5$ , which was unexpected.

There was also a marginal effect of emotion type displayed by the victim on the positive nonverbal behavior displayed by the participants,  $F(1, 141) = 3.81, p = .053^6$ . Surprisingly, participants showed more positive nonverbal behavior with angry ( $M = 9.12$ ) than with sad ( $M = 8.27$ ) victims.

Overall, support for Hypothesis 2 was mixed. Participants did provide more support to sad victims than to angry ones in the form of desiring future contact and making more disclosures. However, participants made more acknowledgments and positive nonverbal displays to angry victims.

### 3.2.1 Hypothesis 2a.

Hypothesis 2a predicted that perceptions of need would mediate the relationship between emotion type and support for sad victims and perceptions of need and perceptions of cost would mediate this relationship for angry victims. To demonstrate mediation, regression analyses were again conducted. First, emotion type would have to predict the predicted mediators of perceived victim need and participant discomfort, the measure of costs. Emotion type did not predict either

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<sup>4</sup> Observed power = .61

<sup>5</sup> Observed power = .85

<sup>6</sup> Observed power = .49

perceptions of victim need,  $\beta = -.08$ ,  $p = .303$ , or participant discomfort,  $\beta = -.08$ ,  $p = .278$ . Therefore, mediation could not occur and Hypothesis 2a was not supported.

### **3.3 HYPOTHESIS 3**

Hypothesis 3 predicted an interaction of relationship type and emotional intensity. No significant findings were discovered. Thus, Hypothesis 3 was not supported.

#### **3.3.1 Hypothesis 3a.**

Hypothesis 3a predicted that the effects discovered above would be mediated by perceptions of victim need for communal partners and the costliness of the interaction for the exchange partners. Because the relationship type by emotional intensity interaction term did not predict any of the 10 outcome variables, Hypothesis 3a could not be supported.

### **3.4 OTHER REGRESSION ANALYSES**

A series of 10 (one for each dependent variable) simultaneous regression analyses were performed in order to explore further the influence of perceived needs and costs on various outcome variables. Participants' perceptions of victim need predicted FIQ scores,  $\beta = -.21$ ,  $p = .008$  and negative nonverbal behavior,  $\beta = .17$ ,  $p = .044$ . Victim need was also a marginally significant predictor of the number of future sessions participants agreed to,  $\beta = -.14$ ,  $p = .085$ .

Participants were less willing to have future contact with victims as the victims' level of need increased. In addition participants increased the amount of negative nonverbal behavior they displayed as victims' needs increased.

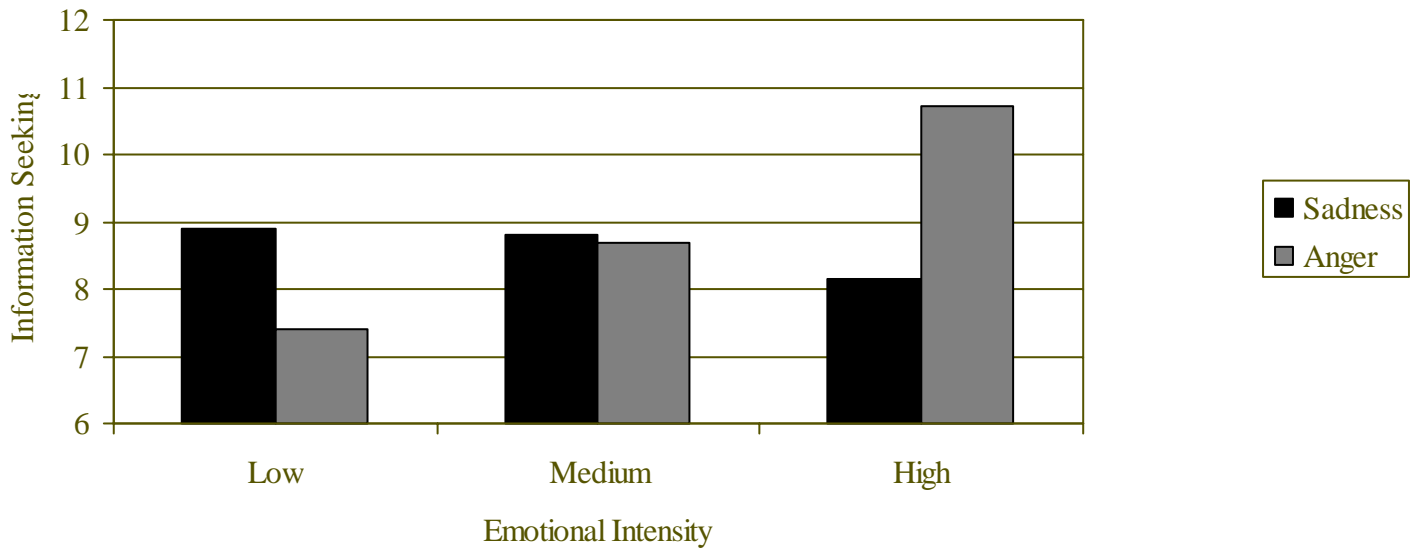
Participants' levels of discomfort, the measure of cost used in this study, predicted participants' willingness to return for future sessions,  $\beta = -.27, p = .001$ , FIQ scores,  $\beta = -.17, p = .038$ , the number of acknowledgments made,  $\beta = -.20, p = .016$ , the number of questions asked,  $\beta = -.19, p = .030$ , the number of disclosures made,  $\beta = -.27, p = .002$ , and positive nonverbal behavior displayed,  $\beta = -.26, p = .002$ . In addition, this measure of costs was a marginally significant predictor of the number of future sessions that participants agreed to,  $\beta = -.15, p = .069$ , and the number of comforting statements made,  $\beta = -.15, p = .086$ . These results suggest that the more uncomfortable participants felt, the less support they offered.

In summary, the independent variables of emotional intensity, desired relationship type and emotion type did not predict the predicted mediators or perceptions of victims' needs or participants' discomfort, so mediation was not possible. However, the data do demonstrate that participants' perceptions of victim need and self-reported levels of discomfort predict a variety of support outcomes.

### **3.5 UNEXPECTED FINDINGS**

The results outlined above directly pertain to the stated hypotheses. No specific hypotheses were stated regarding the interaction between emotion type and emotional intensity. Despite this, such

an interaction emerged for two support variables when 10 ANCOVAs were used. The interaction between emotion type and emotional intensity marginally influenced information seeking behavior,  $F(2, 142) = 2.52, p = .084^7$ . There was no difference in the number of questions asked of sad victims regardless of whether they displayed low ( $M = 8.89$ ), medium ( $M = 8.81$ ), or high ( $M = 8.15$ ) levels of sadness. However, participants asked fewer questions of victims displaying low levels of anger ( $M = 7.40$ ) than of victims displaying medium levels of anger ( $M = 8.68$ ). Victims displaying high levels of anger were asked even more questions ( $M = 10.73$ ). (See Figure 1.)

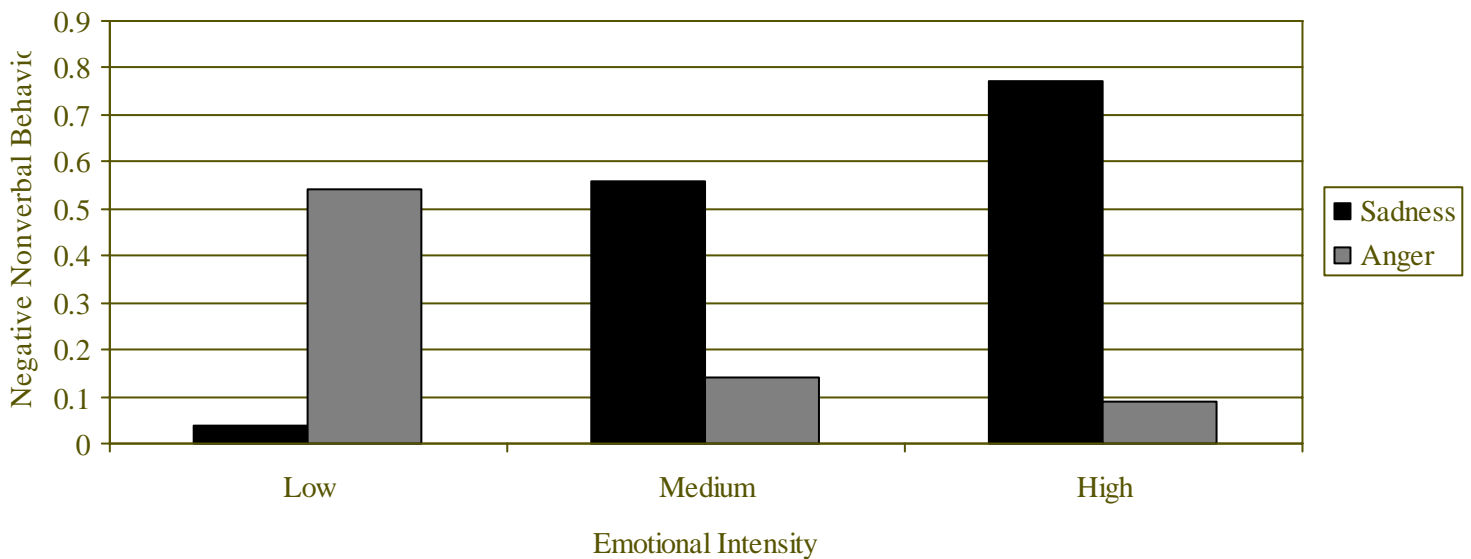


**Figure 1.** Emotion type by emotional intensity interaction on information seeking.

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<sup>7</sup> Observed power = .50.

In addition, an emotion type by emotional intensity interaction emerged on negative nonverbal behavior,  $F(2, 140) = 3.41, p = .036^8$ . Participants who interacted with sad victims displayed less negative nonverbal behavior toward victims displaying low levels of sadness ( $M = .04$ ) than medium ( $M = .56$ ) or high ( $M = .77$ ) levels of sadness. However, the opposite pattern emerged among those who interacted with angry victims. More negative nonverbal behavior was displayed toward victims who displayed low levels of anger ( $M = .54$ ) than those who displayed medium ( $M = .14$ ) or high ( $M = .09$ ) levels of anger. (See Figure 2.)



**Figure 2.** Emotion type by emotional intensity interaction on negative nonverbal behavior.

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<sup>8</sup> Observed power = .63

## 3.6 SECONDARY ANALYSES

### 3.6.1 Self-reported perceptions of emotional intensity and relationship type.

The outcomes of the manipulation checks were not as strong as expected. In particular, the relationship type manipulation was only marginally significant and the emotional intensity manipulation was strong only in the angry condition. These findings raised questions about the validity of the results. In response to these concerns, a series of alternative analyses were conducted. These analyses circumvent the problematic manipulations by using participants' self-reported perceptions of emotional intensity and desired relationship type. Because the emotion type manipulation worked as expected, it was retained for the secondary analyses.

Participants rated confederates' level of emotional intensity on a Likert scale ranging from 1 to 7 (see Appendix B). In both the sad and the angry conditions, participants rated their perceptions of both emotions displayed by confederates. This resulted in two different intensity scores; one for sadness and one for anger. Because the emotion type manipulation was demonstrated to be very effective, the intensity score for the emotional condition that the participants were assigned to was used for these analyses. In other words, ratings of the intensity of victim sadness were used for participants in the sad condition; anger intensity ratings were used for those in the angry condition.

Participants also answered two questions pertaining to how close they felt and how close they would like to feel to the confederates. These were combined into a composite score reflecting the strength of communal versus exchange feelings in participants. This composite score was used as a measure of communal/exchange feelings. This composite did demonstrate adequate reliability ( $\alpha = .79$ ).

This revised data set was then used in a series of 20 regression analyses (one main effect and one interaction effect of interest on ten dependent variables) as an alternative test of the hypotheses. Again, only the significant results are reported here.

### **3.6.2 Hypothesis 1.**

Hypothesis 1 predicted that communal partners would provide more support than exchange partners. In a regression analysis, perceived relationship type was a significant predictor of participants' willingness to return for future experimental sessions,  $\beta = .32, p = .000$ , the number of future sessions they agreed to,  $\beta = .23, p = .004$ , and their FIQ scores,  $\beta = .59, p = .000$ . These effects were all in the predicted direction such that the stronger the desire for a communal relationship, the greater the desire for future contact with the victim.

Perceived relationship type predicted only one of the verbal support categories. However, this was true only for comforting statements, which is the most effortful of the support categories,  $\beta = .24, p = .003$ . Again, participants perceiving a communal relationship made more comforting statements than those perceiving an exchange relationship.

Perceived relationship type also predicted nonverbal behavior. Participants perceiving a communal relationship displayed more positive nonverbal behavior,  $\beta = .30, p = .000$ , while those perceiving an exchange relationship displayed a greater level of negative nonverbal behavior,  $\beta = -.18, p = .029$ .

To summarize, Hypothesis 1 was supported when using participants' self-reported perceptions of relationship type. Communal partners provided more support to victims than exchange partners in a variety of ways. Communal partners were more willing to engage in a



variety of future interactions with the victim, they made more comforting statements, and they displayed more positive and less negative nonverbal behavior than exchange partners.

*Hypothesis 1a.* Hypothesis 1a predicted that the effects of Hypothesis 1 would be mediated by perceptions of victim need for the communal participants and perceptions of victim need and the costliness of the interaction for exchange participants. Regression analyses demonstrated that perceived relationship type was a significant predictor of participant discomfort,  $\beta = -.27$ ,  $p = .000$ , but was not a significant predictor of perceptions of victim needs,  $\beta = .04$ ,  $p = .68$ . Therefore, perceptions of victim need can be ruled out as a mediator. The predictive ability of perceived relationship type on the dependent variables was demonstrated in the analysis described above.

Next, the variables of perceived relationship type and participant discomfort were both entered into a regression equation. Participant discomfort did predict participants' willingness to return for future experimental sessions,  $\beta = -.18$ ,  $p = .03$ . However, controlling for this effect, perceived relationship type remained a significant predictor of this variable,  $\beta = .26$ ,  $p = .002$ . Participant discomfort was not a significant predictor of the number of future sessions that participants agreed to,  $\beta = -.09$ ,  $p = .292$ , or participant FIQ scores,  $\beta = -.05$ ,  $p = .52$ . Therefore, mediation did not occur on any of the future contact variables.

Participant discomfort also did not predict the number of comforting statements made by participants,  $\beta = -.08$ ,  $p = .34$ . Therefore, mediation did not occur for verbal support either.

In terms of positive nonverbal behavior, participant discomfort was a significant predictor,  $\beta = -.17$ ,  $p = .038$ . Despite this, perceived relationship type remained a significant predictor of positive nonverbal behavior,  $\beta = .29$ ,  $p = .000$ . Participant discomfort did not predict

negative nonverbal behavior,  $\beta = -.005$ ,  $p = .954$ . Thus, mediation did not occur for the nonverbal behavior variables either.

In sum, Hypothesis 1a was not supported. Mediation could not be demonstrated on any of the support variables.

### **3.6.3 Hypothesis 2.**

Hypothesis 2 predicted that the type of emotion displayed by the victim would influence social support provided. Hypothesis 2a predicted that these effects would be mediated by perceptions of victim need and costs. Because the secondary analysis relied upon the manipulated emotion type variable, the results were no different from those discussed above.

### **3.6.4 Hypothesis 3.**

Hypothesis 3 predicted a relationship type by emotional intensity interaction effect on social support. A linear effect of emotional intensity on support was expected for those who perceived a communal relationship, while a curvilinear effect was expected for those perceiving an exchange relationship. Testing this proposition requires two regressions on each support variable; one examining linear effects and one determining the presence of a curvilinear effect.

First, the perceived emotional intensity by perceived relationship type interaction term was entered into a regression analysis. It significantly predicted participants' FIQ scores,  $\beta = .55$ ,  $p = .048$ , demonstrating that the stronger the perceived communal relationship, the more future interaction they wanted to have with the victim as the victim displayed increasing levels of

emotion. Additionally, a marginally significant effect of this interaction emerged for information seeking behavior,  $\beta = .63$ ,  $p = .079$ . Again, this was in the predicted direction such that those perceiving a more communal relationship asked more questions as the victim displayed more emotion.

Because a curvilinear effect for those in the exchange condition was expected, a square term for perceived emotional intensity by perceived relationship type interaction also needed to be examined. Results of the regression analysis show that the interaction term using this squared term was a marginally significant predictor of participants FIQ scores,  $\beta = .45$ ,  $p = .073$ .

Hypothesis 3 was weakly and partially supported. Only one of 10 support variables demonstrated a statistically significant interaction effect. Also, the significant effect only demonstrated the predicted linear effect for those perceiving a communal relationship. The predicted curvilinear effect was weak.

*Hypothesis 3a.* Hypothesis 3a predicted that this effect would be mediated by perceptions of victim need and the costs of interaction. The perceived relationship type by perceived emotional intensity interaction did not predict the expected mediators of perceived victim need,  $\beta = -.22$ ,  $p = .527$ , or participant discomfort,  $\beta = -.14$ ,  $p = .672$ .

Additionally, the interaction term including the squared emotional intensity variable did not predict either perceptions of victim need,  $\beta = -.20$ ,  $p = .499$ , or participant discomfort,  $\beta = -.10$ ,  $p = .721$ . Therefore, mediation was not possible, and Hypothesis 3a was not supported.

### 3.6.5 Unexpected Findings.

No emotion type by emotional intensity interactions emerged in the secondary analyses when 10 additional regression analyses were performed. However, when using emotion type by emotional intensity squared as a predictor, a significant interaction was found on the number of advice statements made,  $\beta = .54$ ,  $p = .033$ . When interacting with a sad victim, an inverted U-shaped effect emerged such that more advice was given to victims perceived as displaying a medium level of sadness versus those perceived as displaying low or high levels of sadness. When interacting with angry victims, however, participants gave more advice to those perceiving a high level of anger than to those perceiving low or medium levels of this emotion.

## **4.0 DISCUSSION**

This section first provides an overview of the primary results in the context of previous research. Then, the results of the secondary analyses are reviewed. Next, strengths and limitations of the current study are discussed. Directions for future research are outlined next. Finally, some conclusions based on this research are drawn.

### **4.1 OVERVIEW OF PRIMARY RESULTS**

This study began with the observation that research examining the relationship between emotional intensity and social support has often yielded conflicting results. Some studies (Dovidio et al., 1991; Hobfoll & Lerman, 1988, 1989; Trobst, Collins, & Embree, 1994) have reported that individuals showing high levels of distress are more successful at eliciting social support, while others (Silver, Wortman, & Crofton, 1990) have found that individuals receive more social support when their emotional reactions are restrained. Other research (Steers-Wentzell & Greenberg, 2005; Yee & Greenberg, 1998) demonstrated that the type of emotion displayed also plays an important role in social support provision. Yet another determinant of social support is the type of relationship desired by the support provider (Clark, Ouellette, Powell, & Milberg, 1987; Williamson & Clark, 1989; Yee & Greenberg, 1998). This study

sought to examine how these various factors determine the social support provided to those in need.

Hypothesis 1 predicted a main effect of relationship type, such that communal partners would provide more support than exchange partners. Hypothesis 2 predicted that participants would provide more support to sad victims than to angry victims. Hypothesis 3 predicted that relationship type would interact with emotional intensity such that communal partners would increase the amount of social support they provided as the emotional intensity displayed by the victim increased. Exchange partners were expected to increase in the amount of support they provided when victims displayed medium levels of emotion rather than low level of emotion, but they were also expected to decrease in support provision if victims displayed high levels of emotion. Hypothesis 1a, 2a and 3a predicted that perceived levels of victim need and the perceived costs involved with the interactions would mediate the effects of the primary hypotheses.

Results indicate that relationship type does not influence many forms of social support. In fact, the relationship type only marginally influenced one measure of support-- positive nonverbal behavior. As expected, individuals led to desire a communal relationship displayed more positive nonverbal behavior than those led to desire an exchange relationship.

In contrast, the type of emotion displayed by the victim influenced many forms of social support. As predicted, participants who interacted with a sad victim agreed to return for a greater number of future sessions, were more willing to engage in a variety of future interactions, and made more disclosures. Sad victims might be perceived as more deserving of social support than angry victims. This may be due to sadness being more consistent with the female gender role. Women are expected to express sadness, but they are expected to regulate their anger. When

women violate these gender role expectations, they may drive away potential support. Therefore, adherence to the traditional gender role could potentially mediate the effect. Despite the potential confounding variable of gender-role expectations and gender of the victim, the decision to include only women in the current study was a justifiable one. The current study was a 12 cell design. To include both men and women as confederate victims, would produce a 24 cell design. Also, if men were included as victims, they should also be included as support providers. Same-sex versus opposite-sex dyads would then need to be accounted for. In addition, gender role expectations might not be alleviated. Women may indeed be expected to display sadness rather than anger, but men are also subject to gender role expectations, perhaps even to a greater degree. Men might be expected to display anger more readily than women, but men who display sadness might be viewed as breaking gender role expectations.

There was also a main effect of emotion type displayed by victims on the number of acknowledgments made to victims. This was in a direction opposite from that predicted. Participants made more acknowledgments to angry victims than to sad victims. One must keep in mind, however, that acknowledgments are the least effortful form of verbal support (Samter and Burleson, 1984). Perhaps when presented with an angry victim, conflicting pressures arise. On the one hand, participants want to appear to be helpful to avoid directing the victim's anger toward themselves. In opposition, participants do not perceive a high level of need and may be disapproving of the use of anger by another woman. This may have created ambivalence, which was resolved by providing relatively effortless forms of support.

Similarly, participants displayed more positive nonverbal behavior when interacting with angry victims than with sad victims. Although nonverbal behavior is often outside of our conscious awareness, it is possible that participants made a concerted effort to appear concerned

and helpful. Although the number of participants who indicated suspicion of the experimental procedure was low, having to talk to a stranger about a negative situation in an experimental setting may have increased participants' self-presentational behaviors. These self-presentational concerns may have been heightened when interacting with an angry victim, as angry victims posed more of a threat than sad victims.

There was no effect of relationship type by emotional intensity on any of the support variables examined. Based on the results of this study, it appears that communal and exchange partners do not react differentially to victims depending upon the amount of emotion displayed by that victim.

Despite this relative lack of support for the proposed hypotheses, interesting findings emerged in the regression analyses. Recall that self-reported perceptions of victim need and participant discomfort levels were used as predictors of all support variables. Findings indicate that as perceptions of victim need increased, participants were less willing to have future contact with the victim and they displayed more negative nonverbal behavior. In this experimental situation, this is not very surprising. Participants and victims had no preexisting relationship. Despite the relationship manipulation, a communal or exchange relationship did not really exist. Given that interactions occurred between strangers, it is understandable that potential supporters would be relatively negative toward victims who were perceived as being needy.

Participant discomfort was a significant predictor of an even greater number of support variables. As participants became more uncomfortable during interaction, they wanted to have less future contact with victims, they offered less verbal support and they displayed less positive nonverbal behavior. Overall, this suggests that as support providers become more uncomfortable with a support interaction, they provide less support. An important implication of this finding is



that, in order to be effective, the support recipient and the support provider both must feel comfortable in the supportive interaction.

Two emotion type by emotional intensity interactions were discovered, although such an interaction was not predicted by the hypotheses. The pattern discovered for information seeking behavior was such that when interacting with a sad victim, participants asked an equal number of questions regardless of emotional intensity. However, when interacting with an angry victim, participants asked a greater number of questions as the victim's emotional intensity increased. An opposite pattern emerged for negative nonverbal behavior. Participants showed increasing amounts of negative nonverbal behavior as sad victims increased in the intensity of their emotional displays. However, participants decreased their negative nonverbal behavior as angry victims increased the intensity of their emotional displays. Sad victims pose little threat to support providers, regardless of the level of the intensity of the emotion. Indeed, in the worst case scenario, support providers are likely to suffer only some emotional contagion when dealing with a highly sad victim. Therefore, it makes sense that the emotional intensity displayed by the victim would not have an effect on supportive behavior when that victim was sad. However, when dealing with an angry victim, increasing levels of emotionality may indicate increased levels of threat of harm. Therefore, it may become increasingly important to support providers to appear helpful to deflect the potential harm that may be inflicted as the victims' level of anger rises. This could account for the pattern found among participants interacting with an angry victim.

## 4.2 LIMITATIONS OF MANIPULATIONS

Although pretesting of the materials demonstrated that the manipulations were effective, manipulation checks with data provided from actual participants were less definitive. The emotion type manipulation did work as planned, however the effectiveness of the relationship type and emotional intensity manipulations was not as strong as expected.

Participants received the relationship type manipulation prior to viewing the videotapes of the emotion type manipulation. Perhaps a recency effect was at work whereby participants focused upon the manipulation that occurred closest in time to the interaction phase. This might be remedied in future studies by presenting the emotion manipulation prior to the relationship type manipulation. Of course, this solution might also have its drawbacks. If a recency effect is indeed to blame, this alternative may lead participants to focus upon relationship type at the expense of the emotion manipulations.

The relationship type manipulation may also have been overwhelmed by the emotion manipulation (Clark, personal communication). In previous studies (e.g., Clark, 1987), participants never viewed actual emotional displays. Instead, they saw questionnaires indicating partners' moods. In the current study, the emotional displays by victims delivered by a supposed closed circuit broadcast of the interview were much more vivid, immediate, and intense than merely perusing a questionnaire purportedly completed by the victim. Participants viewed videotapes of these displays, which provided verbal and nonverbal emotion cues in addition to statements of emotion. It may be that participants were focused upon the information they were receiving about the victims' emotional states to the exclusion of the information used to manipulate desired relationship type. That is, the emotional stimuli might have distracted participants from the relationship type manipulation as a kind of retroactive interference. One

alternative to consider in future studies is to increase the vividness of the relationship type manipulation to more closely mirror that of the emotion manipulations.

In addition, the manipulation used for the desired relationship type may have inadvertently manipulated other victim-perception variables. For instance, perhaps this manipulation altered participants' perceptions of how likable or friendly victims were. Although perceptions of friendliness are likely correlated with perceptions of communal relationships, these two constructs should be made more distinct. Only one marginally significant result emerged using this manipulation, but if it had had more of an effect, the results would still be unclear because of this issue.

The emotional intensity manipulation worked well in the angry condition, but not in the sad condition. In this study, extreme displays of sadness were deliberately moderated in order to maintain credibility and to decrease the rate of suspicion seen in earlier studies (Steers-Wentzell & Greenberg, 2002, 2004). Perhaps this study moderated these displays too much. In future research, more extreme displays of sadness may be useful for the purpose of discriminating between high, medium and low levels of sadness. Likewise, the low levels of sadness need to be decreased further to produce a greater spread between the low and medium levels of sadness.

The marginal effectiveness of the manipulations may have decreased the number of significant effects discovered. In order to rectify the weakness of the manipulations, a second set of analyses was performed using participants' reported perceptions of relationship type and emotional intensity. The limitation of this approach, of course, is that the independent variables are not manipulated, but rather rely upon self-reported perceptions. Therefore, causal inferences from these data are less reliable.

### 4.3 OVERVIEW OF SECONDARY RESULTS

A series of regression analyses were performed, using the participants' perceptions of relationship type and emotional intensity. The emotion type manipulation was retained in these secondary analyses, since it was demonstrated to be effective.

Results supporting Hypothesis 1 emerged using this approach. Recall that in the primary analyses, desired relationship type as manipulated had little effect on support. When using participants' self-reported desired relationship type as a predictor, effects emerged for participants' willingness to return for future sessions, the number of future sessions agreed to, willingness to engage in a variety of interactions, the number of comforting statements made and both positive and negative nonverbal behavior. These findings were all in the direction predicted by Hypothesis 1. Those who reported desiring a more communal relationship with the victim wanted to have more contact with the victim, offered more comfort and displayed more positive nonverbal behavior than those who reported desiring a relationship that was more exchange in nature. Those wishing to have a communal relationship also displayed less negative nonverbal behavior than those who wished to have an exchange relationship.

The interaction between perceived relationship type and perceived emotional intensity suggests that participants who perceived a communal relationship also had a greater tolerance for and continued to provide support to participants who were perceived as displaying a greater degree of emotionality. Again, this makes sense. Those who desire a communal relationship might perceive an overly emotional display by the partner as being within normative parameters, whereas those desiring an exchange relationship would not. In addition, those desiring a communal relationship might actually feel more helpful, and thus more positive about

themselves, when faced with a highly emotional other, especially if they can alleviate some of the negative emotion being displayed.

#### **4.4 STRENGTHS AND LIMITATIONS**

From a methodological perspective, one advantage that this study has over previous work, especially the studies that reported conflicting results concerning emotional intensity, is that it did not rely solely upon retrospective self-reports or behavioral intentions, but rather included observations of behavior. Retrospective self-reports are subject to many kinds of biases which may decrease their validity. For instance, individuals may misremember the levels of emotion or support involved or they may respond to the questions as schemas for social support processes dictate rather than as events actually unfolded.

A major advantage of this study over previous research is that it examined a wide variety of support variables. One class of variables examined the potential for future contact with the victim while another set examined verbal behavior and a final set of variables examined nonverbal behavior. Inclusion of a wide variety of support variables is important because support can be communicated in diverse ways. By restricting studies to only one or two indicators of support, we do not get a complete picture of the support process. The fact that the dependent variables of the current study did not form factors suggests the existence of an even greater level of complexity among support variables. This demonstrates that a very fine-grained analysis of support indicators is necessary to fully understand support processes, in line with Ajzen and Fishbein's (1980) distinction between one's attitude toward a behavior and the more global attitude toward an object. While people may have favorable attitudes toward supporting someone

(a global attitude), their attitudes toward specific forms of support may vary. As this study shows, measures of attitudes toward the more specific forms of support are clearly needed.

Despite these strengths, the current study had a number of limitations. Perhaps one of the greatest limitations was the relative lack of statistical power. Many of the effects reported were only marginally statistically significant. Had more participants taken part in the study, these marginal results may have reached traditional levels of statistical significance.

As already mentioned, the manipulations were not as strong as intended. This issue has been discussed above, however an additional point is worth making in reference to the relationship type manipulation. The manipulation made clear the victims' availability (or lack thereof) for a communal relationship. However, the participants' availability for a communal relationship was not assessed. Perhaps the participants in this study were already stretched to their limits in terms of the number of relationships they could handle. This might lead to a reduction in the efficacy of the relationship manipulation.

Additionally, the sample was restricted. This study examined only a female student population. By restricting the study to females, we avoided any confounding effects that gender might present. At the same time, we lack information on how the independent variables might influence men's supportive behaviors. Given that previous studies have demonstrated that women offer more supportive behavior than men (Bullis & Horn, 1995; Dolin & Booth-Butterfield, 1993), we could expect that men would be even less responsive to the needs of victims.

That the participants were all college students also limits the generalizability of the findings. Previous studies examining social support have relied heavily upon community samples

using self-reports of support experiences. While this method does add to external validity, the controls necessary for an experimental study are lacking in such a naturalistic setting.

A related concern is that the experimental procedure demands that strangers interact with one another concerning a negative event. Studies relying upon self-report of social support typically deal with support transactions occurring within established relationships. Although the desired relationship type was manipulated in the current study, this manipulation is undoubtedly lacking when compared to existing relationships with their rich history of interaction and intimacy. Affective reactions of strangers may be seen as less appropriate regardless of whether they are led to desire a communal or exchange relationship. Indeed, participants may have brought to mind others with whom they do share true communal relationships who would be considered much more worthy of support, as their emotional expression does not violate social norms.

It is important to realize that the interactions between participants and confederates were limited in time as well. A five-minute interaction is not necessarily indicative of how natural interactions occur. Although participants were not told exactly how long the interaction would last unless they specifically asked, all knew that it would be “a few minutes.” Given this information, participants may have attempted to endure the brief interaction by “putting on a good face” for the confederate. This presents yet another area for future study. Do potential supporters engage in self-presentation of social support? To date, few studies have examined this issue (for exceptions, see Leary, Nezlek, Downs, Radford-Davenport, Martin & McMullen, 1994; Steers-Wentzell & Greenberg, 2006).

A final limitation concerns the choice of a stressful event. It was thought that by using a common stressor, that of one’s parents getting divorced, the levels of suspicion found in previous

studies (Steers-Wentzell & Greenberg, 2003, 2005) would be alleviated. This was indeed the case. The number of participants indicating suspicion was low (less than 1%). However, it may have introduced other problems. First, parental divorce is a very common event today. Many participants indicated that they themselves had experienced a parental divorce. Because divorce is so widespread, it may be considered by many to be too commonplace to create the high amounts of distress displayed in the high emotion conditions, unless factors in addition to the divorce were also in play.

This may have led participants to make attributions that we did not intend for them to make. In open-ended questions and during the debriefing several participants indicated that they believed that the victim either was experiencing other problems unrelated to the divorce or even that she was suffering from mental health problems such as major depression, especially in the high level emotion condition. This may have been a product of interacting with strangers. Being denied any other background information, participants may have inferred that only if there were other extenuating circumstances would a stranger violate social norms by flagrantly displaying intense emotion.

A final possibility is that potential supporters react differently to victims experiencing different types of stressors. In previous studies (Steers-Wentzell & Greenberg, 2003, 2005, Yee & Greenberg, 1998), a fictitious burglary scenario was presented as the stressful event. Burglary victims undoubtedly evoke different attributions than victims of parental divorce. Although both burglary and divorce involve a sense of loss, burglary can be viewed as presenting much more of a threat to personal safety than parental divorce. That is, many assume that if they were home at the time of a burglary incident, they would become the victim of an assault by the perpetrator as well. This is certainly not the case with parental divorce. Most people do not assume that because



such a divorce is occurring, one of the parents will physically lash out at the child. Because of the differing perceived potentials for physical harm in these two situations, support providers may take different approaches to soothe the victims. Indeed, in previous studies focused on victims of burglary, there were many participants who sought to engage the victim in counterfactual thought focused upon this issue. Many participants would make statements such as, “It was a good thing you weren’t home at the time,” or “You should feel lucky that they didn’t hurt you.” Very few attempts at counterfactual thought were provided in the current study involving victims of parental divorce.

Also, the level of control over a parental divorce is minimal, people view burglary as being a much more controllable event. One can take a number of measures to keep oneself and one’s possessions safe, but there are few steps one can take to save one’s parents’ marriage. In previous studies examining relationship type and emotion type effects on support, instrumental support was an option. For instance, in Clark et al. (1987) and in Williamson and Clark (1989), participants could aid a communal partner by blowing up balloons or sorting lettered tiles. In Steers-Wentzell and Greenberg (2002, 2003, 2004, 2005), participants could make suggestions for “hardening the target,” such as buying new locks and always keeping the premises secure. In the current study, no such instrumental measures could be taken. Instead, the support providers were limited to providing emotional or informational support, which may entail different sets of helping skills.

The implications of these points mirror those mentioned earlier. Support provision is a complex process. Not only must we consider a variety of indicators of support through a fine-grained analysis of support behaviors, but we also must consider a variety of types of support that are provided (e.g., instrumental, informational or emotional).

## 4.5 DIRECTIONS FOR FUTURE RESEARCH

Future research is needed to better understand the decision making process involved in providing social support. The current study can be improved and altered in several ways to meet this goal.

First, a replication using a stronger manipulation of relationship type is called for. The current study used a relationship type manipulation that was very similar to one used in previous studies (e.g., Clark, 1987). Although this manipulation did produce the desired results in these earlier studies and even in the pilot testing of the current study, it seems that it may have been eclipsed by the emotion manipulations used in the current study. Studies have circumvented this problem in the past by having participants bring a friend to the experimental session. Then, some participants interacted with this friend, while others interacted with another participant's friend, who was presumably a stranger. This might be one way around the weak relationship type manipulation, but it produces problems as well. By having friend pairs interact, we lose experimental control, since there is no way of assessing and controlling for the entire relationship history. Confounding variables are certain to exist. Another possibility might be to prime the participants to think about either exchange or communal relationships. This could be accomplished by having participants reflect upon their own relationships of these types or by having participants complete word puzzles using "communal" or "exchange" words. This is admittedly a subtle manipulation and may not be vivid enough to have an impact, but that remains to be examined.

Also, previous studies have not included the five-minute face-to-face discussion of the distressing event used in this study. Perhaps what is needed is a more long-lasting manipulation in the form of comments made by the "victim" indicating availability for a communal

relationship throughout the interaction. Recall that the emotion type manipulation was carried throughout the interaction session in this way, and it was relatively effective.

With regard to the emotional intensity manipulation, there is a need for greater spread among the high, medium and low levels of emotion, especially for sadness. This too, may be remedied by continuing the manipulation throughout the interaction phase, although this presents a risk of greater suspicion on the part of participants.

By presenting a number of videos of victims portraying a variety of behaviors, then asking participants to choose one of the victims with whom they will ostensibly have a future interaction involving supportive behavior, we may glean more insight about the decision making process of potential supporters. Such a study could indicate people's preferences for various qualities displayed by victims.

The current study also tried to determine whether perceptions of victim needs and costs involved with the interaction mediated any of the effects. Mediation did not occur. This may be because of the limited ways in which needs and costs were operationalized. Needs were assessed by asking participants how needy and emotionally unstable the victim appeared. Costs were measured by participants' self-rated levels of discomfort. There are undoubtedly many ways in which these two variables can be conceptualized and measured. Future studies should include more of these measures. For example, costs could be measured not only by self-reported levels of discomfort, but also by perceived threat presented by the victim, nonverbal indicators of discomfort and even physiological measures of arousal. Perceptions of victim needs could be addressed by questions asking how long participants think it would take to recover from the negative event, how well the victim seems to be coping, and whether the victim seems to have other support systems in place.

Finally, future studies should employ a variety of stressors that the “victim” faces, such as loss of a loved one, problems at work or school, and physical illnesses. This information could determine whether potential supporters react differently to victims of various negative life events. Conceivably, in the current study, it may be that the nature of the stressor provided participants with more of a basis to judge costs and needs than the manipulated variables of emotion type, emotional intensity and relationship type.

A study examining the variable of stressor type could be conducted independently of the relationship type and emotion manipulations. In fact, a study more in line with that done by Schwartz and Shaver (1987) on emotional prototypes may be called for, examining types of stressors rather than types of emotions.

#### **4.6 CONCLUSIONS**

In conclusion, this study adds to the literature on social support in several ways. First and foremost, it demonstrates that relationship type, emotion type and emotional intensity displayed by the victim have differential effects on various types of social support behavior. Previous work demonstrated that communal partners were more helpful than exchange partners (Clark, et al., 1987; Williamson & Clark, 1989), but these studies focused on instrumental support. The current study demonstrates that relationship type also influences some forms of emotional support.

Emotion type also influenced emotional support in the current study. This replicates findings of previous studies as well (Steers-Wentzell & Greenberg, 2005; Yee & Greenberg, 1998).

It also verifies that supporters' perceptions of costs and needs influence support outcomes, although relationship type, emotion type, and emotional intensity were not demonstrated to be good predictors of perceived costs and needs. Social exchange theory (Thibaut & Kelley, 1959) proposes that much of our behavior can be explained by the affordances offered by the situation. Although the manipulations of relationship type, emotion type and emotional intensity did not influence participants' perceptions of these costs and benefits, participants' supportive behaviors were nevertheless swayed by the mental accounting of these affordances. Demonstrating that individuals take costs and needs into consideration when providing support is important. Perhaps by increasing awareness that perceptions of costs and needs influence the support they provide, people may be able to increase the effectiveness of support provision. In other contexts, awareness of barriers (i.e., costs) has been implicated in increasing helping behavior (Axelsson, 2001). Of course, a better understanding of the variables influencing perceptions of these costs and needs would allow for even smoother support transactions.

Finally, this study adds support to the argument that the social support process is an incredibly complex one, indicating that future research in this area must consider not only qualities of the support provider and the support recipient, but also the qualities of the stressor, the qualities of the relationship between the support provider and the support recipient and the environment in which the support transaction transpires. George Homans (1961), in the introduction to his classic book on exchange theory, began with the words, "My subject is a familiar chaos (p. 1)." Those words could readily apply to social support. The conflicting literature concerning social support may not be as conflicting as first appears. Those who claim that increased emotional distress elicit more social support (Dovidio et al., 1991; Hobfoll &

Lerman, 1988, 1999; Trobst, Collins, & Embree, 1994) may be as confident in their conclusions as those who argue that moderated displays of emotion lead to more help (Silver, Wortman, & Crofton, 1990). The likely reason for the apparent conflict involves examining a more fine-grained, rather than a holistic, overview of support processes. As the noted psychologist, E.G. Boring, once stated, “There is no inconsistency in nature, just changing conditions,” (Boring, 1950).

In sum, there is still much to be learned about the support process. By examining a wider array of supportive behaviors and types of support, we should be able to improve support transactions, and through this, perhaps improve people’s mental and physical health.

## APPENDIX A

### CONFEDERATE SCRIPT

Interviewer: I would like for you to describe a recent negative event that has happened to you.

Confederate: What about my parents' divorce? Is that the kind of think you're looking for?

Interviewer: Yeah. That works. Let's talk about that. When did it happen?

Confederate: Well, a couple of months ago, my mom called me to tell me that her and my dad were going to get divorced.

Interviewer: How did you feel about this?

Confederate: Well, ever since my mom called, I've been trying to get used to it.

Interviewer: I can understand that, but how did it make you *feel*?

Confederate: (High anger) – Well, it really pissed me off. I mean, it was totally unfair to tell me on the phone like that. I was so angry, I threw my phone after that conversation. I'm still furious about the whole thing. Why can't they just grow up and work it out?

(Medium anger) – Well, it made me angry. I mean, it was unfair to tell me on the phone like that and I am frustrated. I mean, I had to take a walk to clear my head. I'm still angry about the whole thing. Why can't they grow up and work it out?

(Low anger) – Well, it annoyed me. I mean, I feel like it just wasn't right to tell me over the phone like that and it bothered me. I mean, you know...I'm still irritated by the whole thing.

(High sadness) – Well, it made me miserable. I mean, I feel so helpless and there's nothing I can do about it. I mean, I couldn't stop crying. I'm still completely miserable over the whole thing. Why can't they just work things out?

(Medium sadness) – Well, it made me sad. I mean, I feel kind of helpless and there's not much I can do. I mean, (sigh)...I'm still sad about the whole thing. Why can't they work on it?

(Low sadness) – Well, it made me unhappy. I mean, sometimes I feel a little on the helpless side and I'm not really sure what I should do. I mean, you know, I'm still disappointed about the whole thing.

Interviewer: How has this affected you?

Confederate: Well, sometimes when I try to do my work, it pops into my head and I get (really angry, angry, annoyed; miserable, sad, unhappy) all over again.

Interviewer: Is there anything else you'd like to say about this?

Confederate: Uh...not really. Guess that's all.

Interviewer: Thank you.



## APPENDIX B

### QUESTIONNAIRE ADMINISTERED TO PARTICIPANTS

#### First Impressions Questionnaire

Please evaluate the other student on each of the scales by circling the number that most clearly represents your impression of her.

1. Pleasant	7	6	5	4	3	2	1	Unpleasant
2. Angry	7	6	5	4	3	2	1	Not Angry
3. Cold	7	6	5	4	3	2	1	Warm
4. Sad	7	6	5	4	3	2	1	Not Sad
5. Weak	7	6	5	4	3	2	1	Strong
6. Relaxed	7	6	5	4	3	2	1	Tense
7. Nice	7	6	5	4	3	2	1	Awful
8. Active	7	6	5	4	3	2	1	Passive
9. Fast	7	6	5	4	3	2	1	Slow
10. Healthy	7	6	5	4	3	2	1	Sick
11. Rugged	7	6	5	4	3	2	1	Delicate
12. Needy	7	6	5	4	3	2	1	Not Needy
13. Emotionally Stable	7	6	5	4	3	2	1	Emotionally Unstable
14. Not Well Adjusted	7	6	5	4	3	2	1	Well Adjusted

15. Needs Support	7	6	5	4	3	2	1	Doesn't Need Support
16. Not Blameworthy	7	6	5	4	3	2	1	Blameworthy
17. Attractive	7	6	5	4	3	2	1	Unattractive

18. How approving are you of the way that the other student is coping with her situation?

Very Approving	7	6	5	4	3	2	1	Very Disapproving
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19. Specifically, what aspects of her coping influenced how approving/disapproving you are of how she is coping with this situation?

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20. How close (friendly) do you feel to the other student?

Very Close	7	6	5	4	3	2	1	Not Very Close
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21. How close (friendly) would you like to feel toward the other student?

Very Close	7	6	5	4	3	2	1	Not Very Close
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Please evaluate how YOU felt when interacting with the other student.

22. Awful	7	6	5	4	3	2	1	Nice
23. Pleasant	7	6	5	4	3	2	1	Unpleasant
24. Helpful	7	6	5	4	3	2	1	Unhelpful
25. Relaxed	7	6	5	4	3	2	1	Tense
26. Angry	7	6	5	4	3	2	1	Not Angry
27. Ineffective	7	6	5	4	3	2	1	Effective
28. Sad	7	6	5	4	3	2	1	Not Sad

29. Comfortable    7    6    5    4    3    2    1    Uncomfortable
30. Friendly        7    6    5    4    3    2    1    Unfriendly

31. Please **LIST** the thoughts you had when you imagined interacting with the other student  
**(LIST ONE THOUGHT PER LINE, PLEASE).**

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32. Which of the following best describes your feelings about others in general? PLEASE  
 CHOOSE ONLY ONE

\_\_\_\_\_ I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close to me.

\_\_\_\_\_ I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often love partners want me to be more intimate than I feel comfortable being.

\_\_\_\_\_ I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me, or won't want to stay with me. I want to merge completely with another person, and this desire sometimes scares other people away.

CERS

Please indicate by circling a number the degree to which you experienced each of these emotional reactions while talking with the other student. Do not worry if you were not feeling many of these emotions; only a few may apply to this interaction. Be sure to circle a response for each item.

	not at all		moderately			extremely	
1. alarmed	1	2	3	4	5	6	7
2. grieved	1	2	3	4	5	6	7
3. sympathetic	1	2	3	4	5	6	7
4. intent	1	2	3	4	5	6	7
<hr/>							
5. softhearted	1	2	3	4	5	6	7
6. troubled	1	2	3	4	5	6	7
7. warm	1	2	3	4	5	6	7
8. concerned	1	2	3	4	5	6	7
<hr/>							
9. distressed	1	2	3	4	5	6	7

	not at all			moderately			extremely
10. low-spirited	1	2	3	4	5	6	7
11. intrigued	1	2	3	4	5	6	7
12. compassionate	1	2	3	4	5	6	7
<hr/>							
13. upset	1	2	3	4	5	6	7
14. disturbed	1	2	3	4	5	6	7
15. tender	1	2	3	4	5	6	7
16. worried	1	2	3	4	5	6	7
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17. moved	1	2	3	4	5	6	7
18. disconcerted	1	2	3	4	5	6	7
19. feeling low	1	2	3	4	5	6	7
20. perturbed	1	2	3	4	5	6	7
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21. heavy-hearted                    1        2        3        4        5        6        7

22. sorrowful                        1        2        3        4        5        6        7

FIQ-A

Please use the scale below to answer the following questions about the person with whom you interacted.

1 = Definitely Not

2 = Probably Not

3 = Maybe

4 = Probably

5 = Definitely

1. Would you seek advice from this person? \_\_\_\_\_
2. Would you sit next to this person on a three-hour bus ride? \_\_\_\_\_
3. Would you share an apartment with this person? \_\_\_\_\_
4. Would you invite this person to your home? \_\_\_\_\_
5. Would you approve if a relative married this person? \_\_\_\_\_
6. Would you work with this person? \_\_\_\_\_
7. Would you admit this person to your circle of friends? \_\_\_\_\_

## IPS

Please indicate using the following scales to what degree each word describes YOUR behavior during the interaction phase of this experiment.

	Not at all					Very much	
1) supportive	1	2	3	4	5	6	7
2) compassionate	1	2	3	4	5	6	7
3) preoccupied	1	2	3	4	5	6	7
4) not empathic	1	2	3	4	5	6	7
5) helpful	1	2	3	4	5	6	7
6) giving advice	1	2	3	4	5	6	7
7) listening	1	2	3	4	5	6	7
8) bored	1	2	3	4	5	6	7
9) not invested in the other person's problem	1	2	3	4	5	6	7

10) relating to the other person's feelings      1      2      3      4      5      6      7

11) relating to the other person's problem      1      2      3      4      5      6      7

12) not caring      1      2      3      4      5      6      7

13) understanding      1      2      3      4      5      6      7

14) sympathetic      1      2      3      4      5      6      7

15) interested      1      2      3      4      5      6      7

16) focused      1      2      3      4      5      6      7

17) not concerned      1      2      3      4      5      6      7

18) interrupting      1      2      3      4      5      6      7



ATEE

Please indicate on the following scales how strongly you agree with each statement.

1. I think you should always keep your feelings under control.

Disagree very much      1      2      3      4      5      Agree very much

2. I think you ought not to burden other people with your problems.

Disagree very much      1      2      3      4      5      Agree very much

3. I think getting emotional is a sign of weakness.

Disagree very much      1      2      3      4      5      Agree very much

4. I think other people don't understand your feelings.

Disagree very much      1      2      3      4      5      Agree very much

5. When I'm upset, I bottle up my feelings.

Disagree very much      1      2      3      4      5      Agree very much

6. You should always keep your feelings to yourself.

Disagree very much      1      2      3      4      5      Agree very much

7. Other people will reject you if you upset them.

Disagree very much      1      2      3      4      5      Agree very much

8. My bad feelings will harm other people if I express them.

Disagree very much      1      2      3      4      5      Agree very much

9. If I express my feelings, I'm vulnerable to attack.

Disagree very much      1      2      3      4      5      Agree very much

10. You should always hide your feelings.

Disagree very much      1      2      3      4      5      Agree very much

11. When I'm upset, I usually try to hide how I feel.

Disagree very much      1      2      3      4      5      Agree very much

12. I seldom show how I feel about things.

Disagree very much      1      2      3      4      5      Agree very much

13. Turning to someone else for advice or help is an admission of weakness.

Disagree very much      1      2      3      4      5      Agree very much

14. It is shameful for a person to display his or her weaknesses.

Disagree very much      1      2      3      4      5      Agree very much

15. I should always have complete control over my feelings.

Disagree very much      1      2      3      4      5      Agree very much

16. If other people know what you are really like, they will think less of you.

Disagree very much      1      2      3      4      5      Agree very much

17. When I get upset I usually show how I feel.

Disagree very much      1      2      3      4      5      Agree very much



## APPENDIX C

### TABLES OF PRIMARY ANALYSES MEANS

Table C1. Perceptions of Victim Neediness.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	8.64	8.50	10.25	9.92	9.93	7.81
	(SD)	(4.68)	(3.23)	(3.79)	(3.55)	(4.54)	(3.46)
Exchange	Mean	8.17	8.31	9.57	7.64	5.77	7.27
	(SD)	(4.09)	(3.99)	(3.30)	(2.95)	(4.25)	(4.15)

Table C2. Participant Self-Reported Discomfort.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	9.50	11.00	10.92	9.92	9.60	8.67
	(SD)	(3.28)	(5.52)	(4.19)	(3.70)	(4.42)	(2.81)
Exchange	Mean	11.00	9.77	10.79	10.79	10.69	8.82
	(SD)	(3.92)	(4.21)	(4.49)	(2.91)	(4.23)	(4.31)

Table C3. Future Interaction Questionnaire.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	23.92	24.07	23.92	24.21	21.73	22.00
	(SD)	(3.01)	(5.23)	(3.26)	(5.26)	(3.95)	(3.98)
Exchange	Mean	24.08	22.38	24.57	21.21	22.31	21.73
	(SD)	(4.39)	(4.52)	(2.93)	(3.75)	(3.88)	(4.13)

Table C4. Willingness to Return for Future Sessions.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	.71	.71	.83	.83	.73	.85
	(SD)	(.47)	(.47)	(.39)	(.39)	(.46)	(.38)
Exchange	Mean	.77	.77	.86	.64	.54	.55
	(SD)	(.44)	(.44)	(.36)	(.50)	(.52)	(.52)

Table C5. Number of Future Sessions.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	1.61	2.86	2.00	2.71	1.93	1.92
	(SD)	(1.90)	(2.90)	(1.61)	(2.22)	(2.24)	(1.73)
Exchange	Mean	3.81	3.73	3.18	1.07	.92	2.09
	(SD)	(2.97)	(3.22)	(2.66)	(.96)	(.95)	(2.70)

Table C6. Acknowledgments.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	14.93	12.36	12.75	19.55	23.47	19.25
	(SD)	(8.63)	(7.93)	(5.69)	(8.82)	(10.37)	(6.20)
Exchange	Mean	16.77	16.23	14.00	15.21	15.15	19.40
	(SD)	(7.88)	(8.71)	(6.83)	(9.78)	(9.85)	(10.20)

Table C7. Information Seeking.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	9.00	8.21	9.25	6.82	10.60	11.67
	(SD)	(4.74)	(4.14)	(3.82)	(2.36)	(6.14)	(5.60)
Exchange	Mean	8.77	9.46	7.21	7.86	6.46	9.60
	(SD)	(4.21)	(3.73)	(4.10)	(4.74)	(3.31)	(4.90)

Table C8. Disclosure/Opinions.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	4.57	5.50	3.42	3.18	4.80	4.08
	(SD)	(3.50)	(4.64)	(2.97)	(1.60)	(2.70)	(1.93)
Exchange	Mean	6.08	4.31	6.07	2.93	5.00	3.50
	(SD)	(4.03)	(2.98)	(3.08)	(1.33)	(2.42)	(2.08)

Table C9. Advice.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	.21	.79	.33	.45	.27	1.25
	(SD)	(.43)	(1.12)	(.65)	(.52)	(.59)	(2.09)

Exchange	Mean	.08	.54	.36	.14	.92	.20
	(SD)	(.27)	(.66)	(.93)	(.36)	(2.50)	(.42)

Table C10. Comforting Statements.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	2.43	2.71	1.83	2.45	1.33	3.17
	(SD)	(1.87)	(3.75)	(1.95)	(1.29)	(1.63)	(2.98)
Exchange	Mean	1.46	2.54	2.50	2.50	1.62	1.80
	(SD)	(1.27)	(3.04)	(2.35)	(2.28)	(1.94)	(1.81)

Table C11. Positive Nonverbal Behavior.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	9.38	8.14	8.33	8.91	8.93	10.83
	(SD)	(2.26)	(2.48)	(2.46)	(3.81)	(2.49)	(2.44)
Exchange	Mean	8.00	8.00	7.79	8.36	8.69	9.20
	(SD)	(2.45)	(2.92)	(3.58)	(3.20)	(1.97)	(2.44)



Table C12. Negative Nonverbal Behavior.

		Sadness			Anger		
		Low	Medium	High	Low	Medium	High
Communal	Mean	.08	.21	.58	.50	.20	.17
	(SD)	(.28)	(.58)	(1.73)	(1.27)	(.56)	(.58)
Exchange	Mean	.00	.92	.93	.57	.08	.00
	(SD)	(.00)	(2.78)	(2.16)	(1.28)	(.28)	(.00)

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