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**Relationship of Interdependent Self-Construal to Grief after the  
Break Up of a Romantic Relationship: A Test of a Model**

by

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A dissertation submitted to the graduate faculty  
in partial fulfillment of the requirements for the degree of

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## ABSTRACT

Research suggests that people commonly experience symptoms of distress and grief after relationship termination (LeGrand, 1989), which vary as a function of relationship variables such as relationship closeness (Simpson, 1987). This study examined the relationship of interdependent self-construal (Cross & Madson, 1997) to grief in college students after the break up of a romantic relationship and tested mediators of this relationship. It also examined mediators of the relationship between interdependent self-construal and relationship satisfaction. Participants were administered self-report measures assessing interdependent self-construal and potential mediating variables at two time points. Approximately five to seven months later they were contacted to participate in a follow-up phone study to determine whether their relationships had broken up and to assess either grief after the break up or relationship satisfaction for those whose relationships had not terminated. The hypothesis that interdependent self-construal is positively related to grief after break up was not support. Instead, results indicated a trend toward a negative relationship, with individuals with a high interdependent self-construal tending to experience less intense grief after break up than those with a low interdependent self-construal. No significant mediators of this relationship were found. Grief was more intense among those who were highly dependent on their relationships and among those who had few perceived alternatives to the relationship. For those whose relationships stayed together, interdependent self-construal was positively related to relationship satisfaction. This relationship was mediated by social support from the partner and by relationship quality. Implications for research and clinical practice are discussed.

## INTRODUCTION AND LITERATURE REVIEW

Significant relationships serve many important functions in our lives, fulfilling our needs for attachment, social integration, guidance, reassurance of worth, a sense of alliance, and providing us with an opportunity for nurturance (Weiss, 1974). Most people require a certain amount of emotional contact to maintain a sense of well-being (Weiss, 1974), and some theorists have even proposed that humans are innately predisposed to form close relationships (Baumeister & Leary, 1995; Hazan & Shaver, 1992). Of all of our relationships, we may most value our significant romantic or love relationships. This type of relationship is especially important during late adolescence and early adulthood, when the development of intimate relationships is the primary developmental task (Erikson, 1983).

Given the importance of romantic relationships to young adults, it follows that the break up of a romantic relationship may be one of the most difficult experiences that they face during this time. In fact, adolescents and young adults may be more vulnerable to this type of loss than other age groups because when they enter a romantic relationship, they tend to fantasize about a future with their partner (Kaczmarck & Backlund, 1991). Thus, the end of a romantic relationship may cause emotional distress and grief in young adults who experience it. This study was designed to explore the grief reactions of college students to the break up of a significant romantic relationship. Following is a review of the literature on grief after relationship termination as well as the factors, such as self-construal type and relationship closeness, thought to affect those reactions.

## Grief After a Break Up

### Romantic Relationship Termination

Termination of romantic relationships among young adults tends to be fairly common. For example, in a study of 101 college-age romantic couples, 35% of the relationships had ended within approximately one year after the start of the study and 59% had ended within a period of three and a half years (Sprecher, 1994). Another study of 250 college undergraduates found that among those who reported involvement in a romantic relationship, 42% were no longer involved in the same relationship nine months later (Berscheid, Snyder, & Omoto, 1989a).

There are many theories postulating why romantic relationships end. Social exchange theory asserts that people will end a relationship if they perceive more attractive alternatives available to them (Kelley & Thibaut, 1978). Rusbult's (1983) investment model adds additional factors related to relationship commitment, including the balance of rewards and costs and the level of investment in the relationship. A study of over 400 college students provided support for these theories, finding that level of investment in the relationship (including investment of resources such as love, money, and services) and comparison level of perceived alternatives to dating current partner (e.g. "partner is much better than alternatives") were both significantly related to relationship stability three months later (Felmlee, Sprecher, & Bassin, 1990).

The termination of a relationship may tend to follow a certain progression of steps. Battaglia, Richard, Patteri, and Lord (1998) analyzed 1480 responses from participants asked to list the steps of a break up and produced a 16-step ordered script for relationship dissolution, beginning with a lack of interest in the relationship and culminating in the final

break up. Duck (1982) indicated a four phase process model of relationship endings, starting with the *intrapsychic* phase where the dissatisfied person privately evaluates his or her partner and the relationship. The person communicates his or her dissatisfaction to his or her partner in the *dyadic* phase, often leading to prolonged relationship talks. This phase ends only when either attempts are made to mend the relationship or a decision is made to end it. If the decision is made to dissolve the relationship, network members are informed of the decision in the *social* phase, and the final *grave dressing* phase involves rehearsing public accounts of the relationship and its termination and engaging in cognitive strategies such as reflection, attribution, and reassessment of the self and the partner.

Grief reactions. Termination of a significant romantic relationship causes symptoms of distress in many people who experience it. LaGrand (1989) collected data on 4000 students ages 17-24, 27% of whom indicated that they had experienced the recent breakup of a love relationship. The students who had been through a recent breakup had many reactions in common, including feeling angry, rejected, guilty, questioning their values and beliefs, experiencing a decrease in their self-confidence and self-esteem, crying frequently, and suffering from insomnia and digestive disturbances. Sprecher (1994) found similar negative emotional reactions in her study of relationship breakup, including hurt, frustration, depression, and loneliness, as well as the positive emotions of love and relief.

Some researchers have argued that the response to relationship dissolution is most accurately described as grief. According to Stroebe, Stroebe, and Hansson (1993), *bereavement* is the objective situation of having lost someone significant whereas *grief* is the emotional response to the loss. In referring to "loss" rather than "death," this definition of grief is broad enough to encompass non-death losses, including the end of a relationship.

The stages of grief experienced after the death of a loved one may apply to those going through marital separation or divorce. Wiseman (1975) adapted Kubler-Ross's (1969) stages of death and dying for people who are divorced, beginning with the denial of marital estrangement, proceeding through depression and anger, toward the reorientation of life-style and identity, and ultimately resulting in the acceptance of divorce and achieving a new level of functioning. Bowlby's (1961) phases of mourning have also been applied to divorced and separated people, and include the *urge to recover the lost object*, where the person is preoccupied with thoughts of the lost person, *disorganization*, when despair, restlessness, and depression occur, and *reorganization*, where behavior is adapted to a new environment without the lost person (Gray & Shields, 1992). Gray and Shields used factor analysis of a Q-sort of 90 statements made by recently separated and divorced individuals and found that responses could be meaningfully clustered according to Bowlby's three stages. Nine percent of the 123 participants were classified in Bowlby's urge to recover phase, twelve percent in the disorganization phase, and fifty percent in the reorganization phase. Thus, divorced and separated individuals seem to experience similar phases of grief as people who have experienced a recent death.

Because people who have experienced a non-death relationship loss are not often recognized as grieving, some researchers have used the term "disenfranchised" grief to describe their reactions. Disenfranchised grief is "grief that persons experience when they incur a loss that is not or cannot be openly acknowledged, publicly mourned, or socially supported" (Doka, 1989, p. 4). According to LeGrand (1989), there are several factors that impede the coping abilities of young adults who have experienced a recent breakup and thus contribute to disenfranchised grief. First, grief is not usually considered to be a positive,

expected response to this type of loss. In addition, some young adults may feel pressure to conform to parental value systems, causing communication problems with parents and lessening the degree of social support that adolescents and young adults may be able to get from their parents during this time. Finally, support systems, consisting of family members and friends, may react to the breakup as merely a part of growing up, thereby minimizing the meaning of the loss to the griever. LeGrand asserts that minimizing the loss may lead to additional pain and complicated grief for the young person coping with the breakup because older support persons view the loss less seriously than the griever and believe that the griever is better off without the person. Close friends may also minimize the loss by encouraging the griever to date again too soon.

Robak and Weitzman (1995) examined disenfranchised grief by administering the Loss Version of the Grief Experience Inventory (Sanders, Mauger, & Strong, 1985) to a sample of 126 graduate and undergraduate students who had experienced a break up of a romantic relationship. Results showed that participants' median GEI subscale scores were all within 1 standard deviation of the mean subscale scores based on normative data of individuals who had experienced a recent death. Thus, the grief reactions of the two samples were similar. In addition, participants reported that while their grief was generally recognized by themselves and their friends, it was not recognized by their parents and siblings. Similarly, another study of retrospective self-reports of 40 college students who had experienced a recent break up found that 55% reported that their recovery had been impeded by others, including both friends and family (Sorenson, Russell, Harkness, & Harvey, 1993), thus supporting LeGrand's (1989) assertion that the grief of adolescents and young adults who have experienced a recent breakup is disenfranchised.

Individual differences in grief. Multiple theories have been developed to help explain the grieving process, including Bowlby's (1961) phases of mourning and Kubler-Ross' (1969) stages of death and dying. While traditionally these theories have emphasized the grief reactions that people have in common, today's researchers understand grief as "a phenomenon with tremendous differences in the intensity of affective reactions, degree of impairment, and length of time the person experiences the painful affect of loss" (Schwartzberg & Halgin, 1991, p. 244). These individual differences in the grieving process are common for a variety of losses, including the break up of a romantic relationship.

The intensity and duration of symptoms of grief following the dissolution of a romantic relationship may depend on specific relationship variables. A study of 257 young adults who had experienced a breakup within the previous 21 weeks found that the variables most highly positively associated with retrospective reports of distress at the time of the breakup included non-mutuality in alternatives (with the partner perceived as being more interested in alternative romantic partners than the subject), level of commitment, degree of satisfaction, and being left by the other (Sprecher, Felmlee, Metts, Fehr, & Vanni, 1998). Commitment, duration of the relationship, and time since breakup were significantly related to reports of current distress at the time of testing. Similarly, Simpson (1987) studied how ten variables that were measured when the romantic relationship was still intact predicted the emotional distress of 94 college undergraduates after the breakup. The best predictors of intensity and duration of emotional distress following breakup were duration of relationship, closeness of relationship, and perception of difficulty in finding alternative partners. These studies provide substantial support for the idea that intensity of distress and grief after a relationship break up varies according to multiple factors. The current study will examine an

individual difference factor that is hypothesized to affect the intensity of grief in this population: self-construal type.

### Independent and Interdependent Self-Construals

Attention to the role of the self in relationships is important because it is a regulator of many aspects of human behavior and partially explains interaction between the person and society (Cross & Madson, 1997). One proposed framework for considering variations in the self and their implications for relationships involves the notion of self-construals, or “constellation[s] of thoughts, feelings, and actions concerning one’s relationship to others, and the self as distinct from others” (Singelis, 1994, p. 581).

Self-construals were originally divided into two types, *independent* and *interdependent*, based on cross-cultural comparisons showing differences in self-structures between many Eastern and Western cultures (Markus & Kitayama, 1991). Later the two self-construal types were shown to apply differentially to men and women within one culture, the United States (Cross & Madson, 1997). It is the latter application that is most useful in the current study of relationship loss in college students.

The independent self-construal, thought to apply primarily to Western cultures and, within the United States, to men, consists of a unitary, stable self separate from social context (Cross & Madson, 1997; Singelis, 1994). This self-construal is made up primarily of internal traits, thoughts, skills, feelings, and attributes, and the foremost goal for people with an independent self-construal is to maintain a sense of autonomy (Cross & Madson). In contrast is the interdependent self-construal, which usually describes Eastern cultures and U.S. women, consisting of a flexible, variable self that is guided by the principle of the self as “connected to others,” with a primary goal of developing self-defining relationships. In

Eastern societies, this connectedness may largely involve group relationships while for U.S. women, who have developed their interdependence within an individualistic society, the focus tends to be more on individual relationships (Cross, Bacon, & Morris, 2000; Cross and Madson).

Cross and Madson (1997) cite research that supports their assertion that social influences in the United States tend to promote independent ways of thinking, feeling, and behaving for men and relational or interdependent ways of thinking, feeling, and behaving for women. These social influences start at a young age when, for example, parents discuss emotions more with their preschool daughters than with their preschool sons and continue through the differential pressure placed on adult men and women to be caregivers for their children (see Cross & Madson for a review of gender-related social influences).

Furthermore, the authors demonstrate that many gender differences in emotional, social behavior, and other areas may be explained by men's and women's differing self-construals. For example, multiple research findings that U.S. women are more likely to describe themselves in terms of connectedness to others while men are more likely to describe themselves in terms of their independence from others can be at least partially explained by differences in self-construal types.

#### Relationship Implications of Self-Construal Type

There are multiple implications of self-construal type for relationships described by Cross and Madson (1997). First, relationships of people with an interdependent self-construal are viewed as a central part of the self and their thoughts and emotions are interconnected with those of close others. In contrast, individuals with an independent self-

construal may use relationships to aid in comparison of the self with others, to display abilities or attributes, or to demonstrate their uniqueness through dominance over others.

Individuals also may derive self-esteem from their relationships differentially, depending on self-construal type. While relationship closeness and group belongingness serve to enhance the self-esteem of those with an interdependent self-construal, membership in social groups may enhance the self-esteem of an individual with an independent self-construal through the opportunity for expression of unique characteristics. People with an interdependent self-construal may also be more likely than those with an independent self-construal to experience the impact of their significant other's negative and positive life events as well as the effect of the quality of the relationship itself.

Expression of emotion in relationships also may differ according to self-construal type, with interdependent individuals tending to be more willing to express their emotions than independent people. Similarly, the nature of self-disclosure in intimate relationships may vary because close relationships may be perceived as a threat to the autonomy of independent individuals, leading them to avoid the emotional self-disclosure in which interdependent people more often engage. Finally, individuals with interdependent self-construals may tend to be more skilled than people with an independent self-construal at using nonverbal expressiveness and indirect aggression strategies to facilitate the development of intimate relationships.

Self-construal type may also have implications for reactions to relationship loss. For example, some studies have shown that women are more likely to initiate a break up or divorce than men (Albrecht, Bahr, & Goodman, 1983; Kelly, 1982, both as cited in Cross & Madson, 1997) and that men are more likely to begin dating soon after a break up than

women (Sorenson et al., 1993). Cross and Madson (1997) offer as explanation of these results that women (who tend to be more interdependent than men) generally pay more attention to problems in a relationship, and thus would anticipate the break up sooner than would men. In addition, while interdependent women may be able to fulfill their intimacy needs through a variety of relationships (e.g. romantic partner, friends, family), independent men may tend to rely primarily on the romantic relationship, thus necessitating a rapid return to dating to fill the void left by the break up.

Cross and Madson's (1997) review of the multiple implications of self-construal type indicates that the construct may also have a significant effect on intensity of grief after the break up of a romantic relationship, an hypothesis that will be further examined in the current study. For example, people with an interdependent self-construal may experience more grief after the end of a relationship than those with an independent self-construal because they incorporated their significant other into their self-construal. However, it is unclear whether self-construal type has a direct affect on grief or whether it acts through mediator variables. People with an interdependent self-construal may have qualitatively different romantic relationships than people with an independent self-construal. These relationships may include greater relationship closeness, higher relationship quality and satisfaction, more social support gained from the relationship, and higher levels of self-disclosure and interpersonal dependency, qualities that make the loss of such a relationship more painful. Therefore, the following variables will be examined for their role as potential mediators of the hypothesized relationship between self-construal type and grief: relationship closeness, relationship quality and satisfaction, perceived social support, self-disclosure, and interpersonal dependency. These variables are discussed below.

## Potential Mediators

### Relationship Closeness

Although relationship closeness is a widely studied construct, definitions and operationalizations of closeness vary widely. According to Berscheid et al. (1989a), there are currently three primary methods of defining close relationships, all of which are problematic. The first method involves using relationship types as an indicator of relationship closeness. For example, many researchers have assumed that marital relationships are closer than other relationships (e.g. co-workers, friends) and that all marital relationships are close. Because there is increasing understanding that some marital relationships are not close, these relationships would be erroneously labeled as close using this method.

Another common method of assessing closeness involves asking participants for a subjective assessment of the closeness of their relationship. Although this is a very simple way to measure closeness, it does not allow for variability in the perceived meaning of closeness among participants (Berscheid et al., 1989a). Although one participant may define relationship closeness in terms of physical attraction, another participant might define closeness as mutual comfort with self-disclosure, so the researcher cannot be sure of the exact construct he or she is assessing. This method also does not control for participant bias where, for example, a participant may rate his or her marriage as close only because he or she believes that marital relationships should be close.

A final method often used to assess relationship closeness is to get an indication of positive affect in the relationship. With this method, a close relationship is assumed to consist primarily of positively toned emotional events while including very few negative events (Berscheid et al., 1989a). Although positive affect may be an important construct to

assess, Berscheid et al. have argued that it is more related to relationship quality than to relationship closeness and does not allow for clear measurement of closeness.

In response to what was perceived as conceptual and methodological flaws in current relationship closeness research methods, an alternative definition and operationalization have been proposed by Kelley et al. (1983). According to this conceptualization, a relationship is defined in terms of the causal interdependence, or mutual impact, between two people while closeness is defined in terms of certain properties of that interdependence (Berscheid, 1983; Berscheid & Peplau, 1983). The properties of a close relationship include: (a) a change in the state or activities of one person *frequently* causes a change in the state or activities of the other; (b) the change is *strong*; (c) the change is true for *diverse* kinds of activities; (d) this pattern of high interdependence in the activities of the partners has been characteristic of the relationship for a long *duration* of time (Berscheid, 1991; Kelley et al., 1983). These definitions can be linked together by stating that a relationship is defined in terms of the causal interdependence between two people while closeness is defined in terms of certain properties (frequency, strength, diversity, duration) of that interdependence (Berscheid, 1983). Based on these definitions, Berscheid, Snyder, and Omoto (1989b) developed a measure, labeled the Relationship Closeness Inventory (RCI), that assesses the frequency, strength, and diversity of the relationship's interdependence. When they compared this measure to the other three methods of measuring closeness in a sample of college undergraduates, they found that only the RCI was significantly related to relationship length and that it was the only significant predictor of break up, with participants with a highly interdependent relationship the least likely to break up (Berscheid et al., 1989a & b).

Simpson (1987) also found the RCI to be a significant predictor of not only relationship stability, but also of intensity and duration of emotional distress after break up.

The relation between relationship closeness and self-construal type has also been studied. Cross et al. (2000) administered two measures of relationship closeness, the RCI and Aron, Aron, and Smollan (1992)'s Inclusion of the Other in the Self (IOS) Scale, as well as their Relational-Interdependent Self-Construal (RISC) measure to 267 college students. They found that for their most important relationship, participants who had higher scores on the RISC also tended to have higher scores on the RCI strength subscale and on the IOS. However, there was not a significant relationship between the RISC and the RCI frequency and diversity subscales. Thus, people with a high interdependent self-construal may have (or tend to view themselves as having) a closer significant relationship, as indicated by strength of the relationship and inclusion of other in the self, than those with a low interdependent self-construal.

#### Relationship Quality and Satisfaction

In addition to closeness, two other widely studied relationship variables may also be related to self-construal and grief. Relationship quality is defined as the subjective evaluation of a couple's relationship, and is thought to reflect multiple characteristics of relationship interaction and functioning (Spanier, 1979). One common operationalization of relationship quality is termed dyadic adjustment, and is considered to be a process in which the outcome is determined by multiple factors, including degree of troublesome dyadic differences, interpersonal tensions and personal anxiety, dyadic satisfaction, dyadic cohesion, and consensus on matters of importance to dyadic functioning (Spanier, 1976). Relationship quality is able to reliably distinguish between divorced and married samples (Spanier, 1976)

and is thought to be associated with good adjustment, adequate communication, and satisfaction with the relationship (Spanier, 1979). No research is currently available that directly addressed either the implications of self-construal type for relationship quality or the impact of relationship quality on grief after break up. For the purposes of this study, however, it is hypothesized that, because individuals with an interdependent self-construal tend to place more emphasis on and possibly put more work into their relationships, those with an interdependent self-construal will tend to have (or perceive themselves as having) romantic relationships that are higher in quality than those with an independent self-construal. It is in turn hypothesized that a high quality romantic relationship is likely to be grieved more intensely than a low quality relationship.

Relationship satisfaction is another widely studied variable, with assessment methods ranging from the administration of one question (“How satisfied are you with your current relationship?”) to multi-dimensional measures assessing satisfaction with the partner in a variety of areas (e.g. finances, physical attractiveness, emotional support). Relationship satisfaction has been shown to predict future relationship stability (Simpson, 1987) and is positively related to retrospective reports of distress after break up (Sprecher et al., 1998). As with relationship quality, although no research was available that addressed the impact of self-construal type on relationship satisfaction, it is predicted that interdependent self-construal is positively related and independent self-construal is negatively related to relationship satisfaction because of the increased importance given to relationships by those with an interdependent self-construal.

### Social Support

Social support, defined as acts that demonstrate responsiveness to another's needs (Cutrona, 1996b), is an especially well-studied coping resource that has implications for both self-construal type and grief. Correlations between social support and physical and psychological health outcomes have been shown consistently across a variety of situations and using a variety of methods (Cutrona & Russell, 1987; Cohen & Wills, 1985). For example, research on bereavement indicates that support from family and friends is one of the most important moderators of bereavement outcome (Stroebe, Stroebe, Abakoumkin, & Schut, 1996; Stylianos & Vachon, 1993; Norris & Murrell, 1990). Social support in the present study will be defined and operationalized as *perceived* social support, or the belief that support resources will be available if they are needed (Dunkel-Schetter & Bennett, 1990, as cited in Cutrona).

When developing a measure of interdependent self-construal, Cross et al. (2000) found that there was a significant positive correlation between their measure and perceived social support (as measured by the Social Provisions Scale, Cutrona & Russell, 1987). There is little other research on the relationship between self-construal type and perceived social support. However, some basic hypotheses may be formed based on general knowledge about self-construal type and from research on gender differences in coping, since gender is thought to be correlated with self-construal type (Cross & Madson, 1997). For example, since people with an interdependent self-construal are more likely to express emotion in relationships than those with an independent self-construal (Cross & Madson, 1997), they may find it easier to utilize their romantic partner, family, and friends as resources for emotional support than people with an independent self-construal. This hypothesis is at least

partially supported by the frequent finding that there is a greater tendency for females than males to seek social support from others, including their significant other (see Cutrona, 1996b, for a review). It also seems likely that those who perceive that they gain more emotional support from their romantic relationship (i.e., those with an interdependent self-construal) will experience a greater intensity of grief after the loss of that relationship. On the other hand, individuals who perceive that they have high social support from people outside of their romantic relationship (i.e., family and friends) will likely experience less intense grief after relationship break up. Thus, the current study on relationship termination in college students hypothesizes that self-construal type affects the degree of social support people perceive is available to them from their romantic partner. Degree of perceived social support is then in turn thought to be positively related to intensity of grief after the break up. A second hypothesis is that interdependent self construal is positively related to perceived social support from family and friends, which in turn is negatively related to intensity of grief after relationship termination.

### Self-Disclosure

Another variable that may serve as a mediator between self-construal type and grief after a relationship break up is self-disclosure, defined as the process of revealing one's inner thoughts, feelings, and past experiences to another person (Waring, Holden, & Wesley, 1998). Self-disclosure is thought to be critical to the development of close, confiding relationships (Jourard, 1971) and has been shown to be related to a wide variety of intrapersonal and interpersonal factors. For example, Derlega, Metts, Petranio, and Marguhs (1993) suggest that self-disclosure can enhance health, self-esteem, and the ability to cope. Another study of loneliness found support for the hypothesis that disclosing oneself in a

relationship decreases the likelihood of loneliness (Mahon, 1982). In addition, self-disclosure has been shown to account for over 70% of the variance in marital intimacy scores in a group of married couples (Chelune, Waring, Vosk, Sultan, & Ogden, 1984). It follows that if self-disclosure in an intimate relationship has many positive benefits, including increased self-esteem and coping abilities and decreased loneliness, then the loss of that intimate relationship, and thus the loss of an opportunity for self-disclosure, may have many negative consequences. These may include an increased sense of loneliness and isolation as well more intense feelings of grief for which the individual may have little outlet. Thus, it seems likely that degree of self-disclosure in a romantic relationship has implications for intensity of grief after the break up of that relationship.

An hypothesized relationship between self-construal type and self-disclosure in the romantic relationship may be guided by Cross et al.'s (2000) finding that individuals who have high interdependent self-construal engage in more behaviors that enhance and maintain the relationship. As self-disclosure is a relationship enhancing behavior that can lead to increased intimacy (Chelune et al. 1984), it is likely that those who have a high interdependent self-construal may engaged in more self-disclosure than those with a low interdependent self-construal.

### Interpersonal Dependency

Another potential mediator is interpersonal dependency, defined as the “complex of thoughts, beliefs, feelings, and behaviors revolving around the need to associate closely with, interact with, and rely upon valued other people” (Hirschfeld et al., 1977, p. 610). These thoughts include views of the self and relationships with others, the beliefs pertain to the value of friendship, intimacy, and interdependency, the feelings include positive and negative

emotions, and the behaviors are designed to seek or maintain interpersonal closeness (Hirschfeld et al.).

Although dependency seems at first to tap the same construct as interdependent self-construal, it is distinct in that the former is thought to be a negative, excessive quality while the latter is a neutral to positive variable. The negativity of dependency has been demonstrated by researchers who have shown an excess of interpersonal dependency to be strongly related to depression, alcoholism, and other emotional disorders (Hirschfeld et al., 1977). Because dependent people tend to rely excessively on others for their emotional and practical needs, research has also shown interpersonal dependency to be linked to insecure or inconsistent relationships and to high degrees of loneliness (Mahon, 1981).

Although no research is available that examines the relationship between interdependent self-construal and interpersonal dependency, it seems likely that they overlap while still remaining distinct constructs. An individual who constructs her self-concept based on her relationships with others (interdependent self-construal) may or may not also tend to rely excessively on her relationships to get her needs met (dependency). Various combinations of high and low interdependent self-construal and high and low dependency may also have implications for grief after a break up. For example, people high on both interdependent self-construal and dependency may experience very intense grief after break up because it both affects their self-concept and eliminates the opportunity to get their needs met in that relationship. Individuals high on only interdependent self-construal may experience less intense grief because although they may still need to redefine their self-concept, they are more likely to be able to get their needs met in other relationships. In

addition to testing for mediation, interpersonal dependency was also tested for moderation of the relationship between interdependent self-construal and grief.

### Perceived Relationship Alternatives

The final potential mediator of the relationship between interdependent self-construal and grief is perceived available alternatives to the dating relationship. Perceived alternatives are one factor in Rusbult's (1983) investment model of relationships, along with relationship rewards and costs. They have also been shown to be negatively related to relationship stability (Felmlee et al., 1990; Kelley & Thibault, 1978) and a stronger predictor of marital disruption than relationship satisfaction (Udry, 1981). In addition, non-mutuality of alternatives, where the romantic partner is thought to have more alternatives to the relationship, was positively related to distress after the break up of a romantic relationship (Sprecher et al., 1998). Thus, it is expected that this study will find a similar relationship, with perceived alternatives to the relationship negatively related to grief after relationship termination.

Although there is no available research on the relationship between interdependent self-construal and perceived relationship alternatives, an hypothesis may be formed based on the idea that individuals with high interdependent self-construal place more emphasis on relationships and engage in more behaviors that enhance and maintain their relationships (Cross et al., 2000). Because individuals with high interdependent self-construal presumably tend to focus more on and work harder in their interpersonal relationships, it may be assumed that they would therefore focus less on and possibly have fewer alternatives to their primary relationships. Therefore, it is hypothesized that interdependent self-construal is negatively related to perceived relationship alternatives.

### Summary

To summarize, it appears that we may have an innate predisposition to seek out close attachments, accompanied by a set of biological responses that occur when the attachment to a significant other is lost, including seeking the lost figure and distress (Hazan & Shaver, 1992). These principles apply to both death and non-death losses, especially the loss of a significant romantic partner. Multiple studies indicate that people commonly experience several symptoms of distress after relationship termination (LeGrand, 1989), which vary according to relationship variables such as the duration of the relationship (Simpson, 1987; Sprecher et al., 1998). These distress symptoms may be most accurately characterized as grief (Gray & Shields, 1992; Wiseman, 1975), a process that tends to be highly individualized (Schwartzberg & Halgin, 1991). Self-construal type is one factor that may contribute to individual differences in grief after a break up. The impact of self-construal on grief may be either direct or indirect, mediated by factors such as relationship closeness, quality, and satisfaction, as well as perceived social support, self-disclosure, interpersonal dependency, and perceived relationship alternatives.

The current study is designed to test a model, drawn from the existing literature, of the grief reactions of college students who have experienced a recent break up of a romantic relationship. Depression was also included as an additional measure of distress after break up. Because there is not currently an available measure of independent self-construal and in the interest of minimizing the number of statistical analyses, only interdependent self-construal will be examined in this study. In other words, degree of interdependent self-construal will serve as the predictor variable. Therefore, the model, presented in

**Figure 1, includes relationship closeness, relationship quality, relationship satisfaction, perceived social support, self-disclosure, interpersonal dependency, and perceived relationship alternatives as potential mediators between interdependent self-construal and grief and depressive reactions. The same variables will be also be examined for their role as mediators between interdependent self-construal and relationship satisfaction at follow-up for participants who indicate that their romantic relationship is still intact. This model is presented in Figure 2.**

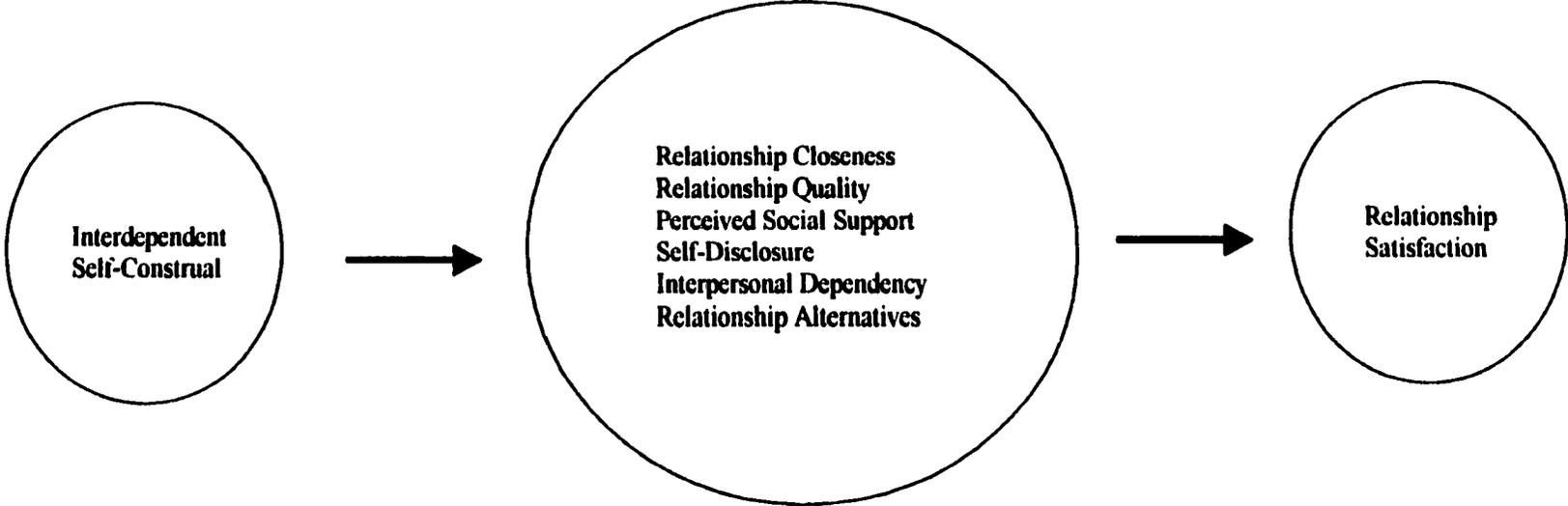
**Figure 1**

**Model of the Hypothesized Relationship Between Interdependent Self-Construal and Grief After Relationship Break-Up**



**Figure 2**

**Model of the Hypothesized Relationship Between Interdependent Self-Construal and Relationship Satisfaction at Follow-Up**



## METHOD

### Participants

Participants at Time 1 were undergraduates earning extra credit for their introductory psychology courses at Iowa State University. A subset of these participants (those who indicated current involvement in a significant romantic relationship) were asked to attend a session later in the semester (Time 2) to complete additional measures. Participants at Time 2 were also asked to participate in a follow-up (Time 3) approximately 5-6 months after Time 1. At Time 3, participants who agreed to be contacted were called for a phone interview. A college student sample was selected because of the relative frequency of relationship break ups that occur during the college years (Sprecher, 1994; Berscheid et al., 1989a) as well as the emphasis that young adults place on romantic relationships (Kaczmarck & Backlund, 1991; Erickson, 1983).

A total of 1195 participants completed questionnaires in the mass testing session at Time 1 to earn extra credit for their introductory psychology classes. Of these, 202 participants completed questionnaires at Time 2 after being invited by telephone to come to a small group testing session. Of the 202 Time 2 participants, 148 agreed to be contacted for the follow-up study. Of these 148 potential participants, 108 were contacted by phone for the follow-up at Time 3; 15 declined to participate, 24 were not reachable, and 1 was excluded from the follow-up study because her partner had died. At Time 3, 87 of the participants were still involved in the same relationship while 21 participants had experienced a break up.

Complete demographic information was available for the 202 Time 2 participants. There were 143 female and 59 male participants and the mean age of participants was 19.25 (SD = 1.99), with a range of 17-42. The mean age of the participants' romantic partners was

19.88 ( $SD = 2.87$ ), with a range of 15-44. Most of the relationships were heterosexual, while one was a lesbian relationship.

At Time 2, 106 participants lived in the same town as their romantic partner and 95 lived in different towns (data was missing for 1 participant). Of the 95 participants who reported living in a different town than their partner, 10 lived less than 30 miles away, 14 lived 31-60 miles away, 21 lived 1-2 hours away, 15 lived 2-3 hours away, and 35 lived 3 or more hours away from their romantic partner. At Time 2, 17 participants were living with their romantic partner and 16 participants were engaged to be married. The 202 study participants had been dating their romantic partner for an average of 18.27 months ( $SD = 14.25$ ) at Time 2, with a range of 1-67 months.

### Measures

During the mass testing session at Time 1, participants were administered a measure of interdependent self-construal type. At Time 2 during group testing sessions, the following constructs were assessed: relationship closeness, perceived social support, relationship quality, relationship satisfaction, self-disclosure, perceived relationship alternatives, and interpersonal dependence. During the phone interview at Time 3, participants who indicated that they had broken up with their romantic partner were administered measures of grief and depression. Participants who said they had not broken up with their partners were again administered a measure of relationship satisfaction. In addition, participants at all three times completed demographic questionnaires as well as questions assessing current involvement in a romantic relationship. A high score on each measure indicates a high level of each construct.

### Interdependent Self-Construal

As discussed earlier, interdependent self-construal consists of a self-concept that is determined by a focus on and a goal of developing and maintaining self-defining relationships (Cross and Madson, 1997). Although there are several measures of interdependent self-construal currently available, few match Cross and Madson's (1997) conceptualization of interdependence, which includes a cognitive component of thinking of oneself as related to close others and reflects interdependence as a general orientation towards representing the self in terms of close relationships (Cross et al., 2000). Cross's Relational-Interdependent Self-Construal Scale (RISC; Cross et al.) fulfills both of these criteria.

The RISC (see Appendix A) consists of 11 items that were generated by the authors or modified from measures of conceptually related constructs. Rated on a 7-point Likert scale ranging from strongly disagree to strongly agree, items include "My close relationships are an important reflection of who I am" and "My sense of pride comes from knowing who I have as close friends." The measure has high internal consistency, with item-total correlations ranging from .54 to .61 and coefficient alphas from .85 to .90, and good test-retest stability over one month ( $r = .74 - .76$ ) and two month ( $r = .63-.73$ ) intervals. In addition, the RISC shows convergent and divergent validity, is moderately associated with other measures of communalism, empathy, and interdependence, but is unrelated to measures of independence, well-being, and social desirability. As was expected, women consistently scored higher on the RISC scale than did men across a series of studies and the interdependent self-construal seems to at least partially account for gender differences in perceived social support (Cross et al., 2000). Finally, Cross et al. found that for important

relationships, interdependence was significantly positively correlated with the tendency to be influenced by the other person (measured by the Relationship Closeness Inventory; Berscheid, Snyder, & Omoto, 1989b) and the tendency to view the other as a part of the self (measured by the Inclusion of Other in the Self Scale; Aron et al., 1992).

### Potential Mediators

Relationship closeness. As noted above, for the purpose of this study relationship closeness is defined in terms of properties (frequency, strength, diversity, duration) of causal interdependence between two people (Berscheid, 1983). This definition is best operationalized in the Relationship Closeness Inventory (RCI; Berscheid et al., 1989b; see Appendix B), which consists of subscales assessing frequency, diversity, and strength of the relationship as well as questions about the length of the relationship. The frequency scale asks respondents to estimate the number of hours and minutes they spent alone with the partner in the morning, afternoon, and evening of a typical day within the past week. To obtain a diversity scale, participants are asked to indicate the number of different specific activities they engaged in with their partner during the past week, choosing from a checklist of 38 activities (e.g. prepared a meal, went to a movie, visited friends, etc.). Finally, the strength scale contains 34 items that assess the extent to which the partner influences the respondent's everyday behaviors, decisions, plans, and goals in several life domains (e.g. financial security, social events, use of free time, etc.). The authors state that duration of relationship closeness is not measured because it is too difficult to assess using a self-report measure.

The RCI shows good test-retest reliability over a 3-5 week interval (total  $r = .82$ , frequency = .82, diversity = .61, strength = .81) and good internal consistency across

relationship type (diversity = .87, strength = .90; although the frequency scale's alpha is only .56, the authors state that there is no reason to expect people who spend a lot of time alone with their partners in the morning to necessarily spend substantial time with the partner later in the day). The RCI shows good construct and divergent validity, is significantly positively related to relationship length, and is a significant predictor of break up (Berscheid et al., 1989b).

As a further indication of relationship closeness, Aron et al.'s (1992) Inclusion of Other in the Self (IOS) Scale was administered to participants (see Appendix C). Based on the premise that people are motivated to enter and maintain close relationships in order to expand the self by absorbing the resources, perspectives, and characteristics of the other (Aron, Aron, Tudor, and Nelson, 1991), the IOS consists of a single pictorial item in which participants are asked to indicate which set of overlapping circles (labeled "self" and "other") best describe their current romantic relationship. The measure has good test-retest reliability (.85 for romantic relationships), convergent validity with the RCI intensity and strength subscales, divergent validity, and predictive validity for whether relationships were intact three months later.

Relationship quality and satisfaction. Relationship quality was assessed by the widely used Dyadic Adjustment Scale (DAS; Spanier, 1976; see Appendix D), which consists of 32 items from a pool of 300 items that were judged for content validity, tested in samples of couples, and factor analyzed. The DAS has four subscales: Dyadic Consensus (e.g., extent of agreement or disagreement on handling family finances), Dyadic Satisfaction (e.g., "How often do you and your partner quarrel?"), Dyadic Cohesion (e.g., "How often do you and your mate engage in outside interests together?"), and Affectional Expression (e.g.

extent of agreement or disagreement on demonstrations of affection). The DAS has good reliability (coefficient  $\alpha = .73-.90$  for individual subscales;  $.96$  for total DAS) and validity, with criterion validity demonstrated through an ability to significantly distinguish between divorced and married samples as well as construct validity indicated through correlations with the Marital Adjustment Scale (Spanier, 1976).

Satisfaction with the relationship was assessed at Time 2 and Time 3 using the Satisfaction Index developed by Simpson (1987; see Appendix E) for his study of relationship break up. The index consists of 11 items on which participants indicate on a 7-point scale the extent to which they are satisfied with their current dating partner. Items include financial resources, physical attractiveness, ability to be close and intimate, and reliability/trustworthiness. Overall reliability for the measure is good (Cronbach  $\alpha = .85$ ).

Perceived social support. Perceived social support was measured using the Social Provisions Scale (SPS, Cutrona & Russell, 1987; see Appendix F), which consists of 24 items reflecting Weiss' (1974) six functions of social relationships: guidance, reliable alliance, reassurance of worth, opportunity for nurturance, attachment, and social integration. Coefficient alphas range from  $.65$  to  $.76$  across the subscales, with a total alpha of  $.92$ . The measure also has convergent and divergent validity, with correlations between the SPS and other social support measures much higher than correlations between the SPS and other variables (e.g. depression, introversion/extraversion). In addition, the SPS is predictive of loneliness, with subscales differentially predicting distinct loneliness types (Cutrona & Russell). For the purpose of this study, the 12-item source-specific version of the SPS ( $\alpha = .80$  in the current study) was used which refers to the romantic partner. Items include "I can depend on my partner to help me, if I really need it" and "I feel I lack emotional closeness

with my partner.” A 6-item source-specific version of the SPS referring to parents ( $\alpha = .78$  in the current study) and a 6-item version referring to friends ( $\alpha = .75$  in the current study) were also used.

**Self-disclosure.** Self-disclosure was assessed using portions of the Self-Disclosure Scale (SDS; Wheelless, 1976; see Appendix G) and the Emotional Self-Disclosure Scale (ESDS; Snell et al., 1988; see Appendix M). The SDS is a 32 item scale with good reliability ( $\alpha = .70-.87$ ) and validity. For example, reported self-disclosure was meaningfully higher in relationships perceived to be high in solidarity than in those perceived to be low. It consists of five subscales, including Intended Disclosure, Amount, Positiveness-Negativeness, Control of Depth, and Honesty-Accuracy. For the purposes of this study, only the Amount ( $\alpha = .85$ ; e.g. “I do not often talk about myself”) and Control of Depth ( $\alpha = .79$ ; “I often disclose intimate, personal things about myself without hesitation”) subscales were administered.

In addition, items from the EDSD were used to assess how willing people are to discuss specific emotions with their romantic partner (see Appendix H). Internal (alpha = .86-.95) and test - retest reliabilities (.58-.75) for the EDSD were good when spouse/lover was used as the disclosure recipient (Snell et al., 1988). The EDSD consists of 40 items covering 8 emotions (Depression, Happiness, Jealousy, Anxiety, Anger, Calmness, Apathy, and Fear), with participants asked to indicate how willing they are to discuss each topic with their romantic partner (e.g. “Times when you felt sad,” “Times when you felt afraid”). In the interest of time, the measure was shortened to 24 items covering the 8 subscales.

**Perceived relationship alternatives.** The Marital Alternatives Scale (MAS; Udry, 1981; see Appendix K) was used to measure perceived relationship alternatives. The MAS

is an 11 item scale designed to measure the respondents' "perception of how much better or worse off they would be without their present spouse, and how easily that spouse could be replaced with one of comparable quality" (p. 889). The test-retest reliability for the MAS is good (.70) and it was shown to be a better predictor of marital disruption than marital satisfaction (Udry, 1981). For this study, 4 items referring to marital economic resources were deleted (e.g. "How likely is it that you would be better off economically?") and the separate husband and wife versions were combined using the term "romantic partner."

Interpersonal dependence. The Interpersonal Dependency Inventory (IDI; Hirschfeld et al., 1977; see Appendix I) was used to measure dependency. The IDI consists of 46 items and three subscales: Emotional Reliance on Another Person, which reflects a wish for emotional support and approval from others, Lack of Social Self-Confidence, which assesses desire for help in decision-making, social situations, and taking initiative, and Assertion of Autonomy, reflecting a preference for independent behavior and aloneness. Thus, interpersonal dependency is operationalized as emotional attachment to others, self-doubts about capacity to function independently, and an element of denial of the extent of dependency on others. Only the first two subscales were used in the current study, as they have better validity (significant correlations with neuroticism, anxiety, and depression) and split-half reliability (.87 and .78, respectively) than the other subscale.

### Follow-Up Measures

Grief. Although the prevalence of grief research seems to be gradually increasing, there remains a paucity of good measures in the field. Several researchers in the area have developed grief measures, but few of these measures provide good reliability and validity and they are not commonly used. Two of the best available measures of grief are the Core

Bereavement Items (CBI; Burnett, Middleton, Raphael, & Martinek, 1997) and the Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1979).

The Core Bereavement Items (CBI; Burnett et al., 1997; see Appendix M) are 17 items derived from the grief/bereavement literature and from clinical research. The CBI has three subscales, Images and Thoughts (7 items), which includes cognitions about the lost person, Acute Separation (5 items), which is yearning and focusing on the lost person, and Grief (5 items), including the affective response to reminders of the lost person. Reliability ( $\alpha = .91$ ) and discriminant validity are good for the CBI. For this study, the wording of the questions was changed slightly to refer to a relationship break-up, rather than a death (e.g. “I experience images of the events surrounding the break-up” rather than “I experience images of the events surrounding x’s death”). In addition, each question of the CBI was asked twice, once asking the respondent to apply the question to the present (labeled “Core Bereavement Items Time 3”), and once asking the respondent to apply the question to what they experienced immediately following the break-up (labeled “Core Bereavement Items Retrospective Report”).

In addition to the CBI, participants were administered the Impact of Event Scale (Horowitz, Wilner, & Alvarez., 1979; see Appendix J). Although designed to generally study responses to stressful life events, subscales of the IES were tested on and subsequently used with bereaved individuals. The IES consists of two subscales, Intrusion (7 items) and Avoidance (8 items), which were initially formed based on in-depth psychotherapy interviews. Intrusion is characterized by “unbidden thoughts and images, troubled dreams, strong pangs or waves of feelings, and repetitive behavior” while Avoidance consists of “ideational constriction, denial of the meanings and consequences of the event, blunted

sensation, behavioral inhibition or counterphobic activity, and awareness of emotional numbness” (Horowitz et al., 1979, p. 210). The IES has good split-half reliability ( $r = .86$ ), internal consistency (intrusion =  $.78$ , avoidance =  $.82$ ), and test-retest reliability (total =  $.87$ , intrusion =  $.89$ , avoidance =  $.79$ ), and is sensitive to change in stress levels over time.

Depression. To measure depression, the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977; see Appendix L) was used. The CES-D is a 20-item self-report scale designed to measure depressive symptomology in general populations, with items selected from a pool of items from previously validated depression scales (e.g. “During the last week I felt that everything I did was an effort”). The CES-D has good internal consistency ( $.85-.90$ ) and it discriminates well between psychiatric inpatient and general population samples and correlates highly with other measures of depression (Radloff).

#### Procedure

At Time 1, students in the research participation pool were administered the Relational-Interdependent Self-Construal Scale (Cross et al., 2000) during a Fall 1999 mass testing session. Participants were also asked to answer demographic questions about their age, gender, and year in school as well as a question assessing dating status. The questionnaire took approximately 5 minutes to complete and students received extra credit in return for their participation.

Mass testing participants who indicated that they were currently involved in an exclusive romantic relationship were contacted by phone and invited to attend one of several group testing sessions at Time 2. During the testing session participants filled out a questionnaire containing several instruments. This questionnaire included: the Relationship

Closeness Inventory (Berscheid et al., 1989b), the Inclusion of Other in the Self Scale (Aron et al. 1992), the Social Provisions Scale (Cutrona & Russell, 1987), the Dyadic Adjustment Scale (Spanier, 1976), the Satisfaction Index (Simpson, 1987), the Self-Disclosure Scale (Wheeless, 1976), the Emotional Self-Disclosure Scale (Snell et al., 1988), the Marital Alternatives Scale (Udry, 1981), and the Interpersonal Dependency Inventory. The questionnaire took approximately 50 minutes to complete, for which participants received one extra credit point. Participants were also asked whether they were willing to participate in a follow-up study in the spring semester, a method which resulted in 71% participation in a prior study of relationships (Trinke & Bartholomew, 1997).

The follow-up study at Time 3 took place approximately 5-7 months after the initial administration of instruments. Although the follow-up period was relatively short, the time period was necessary in order to ensure participation within the same academic school year. In addition, prior studies of relationship break up have shown that short intervals are sufficient to examine factors associated with stability in premarital dating relationships (Berscheid, 1994), with break up rates ranging from 35-42 % during a follow-up period of one year or less (Sprecher, 1994; Berscheid et al., 1989a).

Consistent with Simpson's (1987) study of relationship break up, participants who volunteered at Time 2 were given a phone survey at Time 3 to determine if they were still involved in the same dating relationship. Those who indicated that they had experienced a break up of their relationship since Time 2 were asked to complete a 15 minute phone interview, with questions drawn from the Center for Epidemiologic Studies – Depression Scale (Radloff, 1977), the Core Bereavement Items (Burnett et al., 1997), and the Impact of Event Scale (Horowitz et al., 1979). Participants who said that they were still dating the

same romantic partner were administered the Satisfaction Index (Simpson, 1987) over the phone, which took approximately 5 minutes to complete. In return for their participation, their names were entered into a drawing for three, \$25 gift certificates to a local store of their choice.

### Data Analysis

This study was designed to explore the relationships between interdependent self-construal and variables assessed 5-7 months later (i.e. relationship satisfaction and grief and depression after relationship break up) and to test for mediators (relationship closeness, relationship quality and satisfaction, perceived social support, self-disclosure, interpersonal dependency) of the relationships between interdependent self-construal and the outcome variables. According to Baron and Kenny (1986), a variable is considered to be a *mediator* when it partially or fully accounts for the relationship between the independent and dependent variables. They assert that three conditions must be met for a variable to be considered a mediator. First, the independent variable (e.g. interdependent self-construal) must predict the mediator (e.g. relationship closeness). Second, the mediator (relationship closeness) must predict the dependent variable (e.g. grief after break up). Finally, when the mediator is included, the direct impact of the independent variable (interdependent self-construal) on the dependent variable (grief) must decrease. In this example that would mean that relationship closeness at least partially accounts for the relationship between interdependent self-construal and grief and can be considered a mediator.

Following Baron and Kenny's (1986) suggestion, a series of three regression models was used to test for mediation in this study. These regression models will be described in detail using the previous example of interdependent self-construal serving as the independent

variable, grief after break up serving as the dependent variable, and relationship closeness serving as the potential mediator. The first equation regresses relationship closeness on interdependent self-construal. In order to fit the first criterion for mediation, interdependent self-construal must be significantly related to relationship closeness in this model. The second equation regresses grief on interdependent self-construal; grief must be significantly related to interdependent self-construal in this model in order to fit the second criterion of mediation. The final equation regresses grief on both interdependent self-construal and relationship closeness. In this model, relationship closeness must be significantly related to grief to fit the criterion of mediation. The final criterion for mediation is that the effect of interdependent self-construal on grief in the third equation must be decreased relative to its strength in the previous equation, which did not include relationship closeness. This difference was examined for both statistical significance ( $p < .05$ ) and absolute magnitude (Baron & Kenny, 1986). If all of the criteria are met, it can be concluded that relationship closeness functions as a mediator between interdependent self-construal and grief after relationship break up. This set of regression equations was repeated for each dependent variable (grief and relationship satisfaction) and for each mediator (relationship closeness, relationship satisfaction, relationship quality, perceived social support, self-disclosure, and interpersonal dependency).

## RESULTS

### Descriptive Statistics for Time 1, Time 2, and Time 3 Variables

Table 1 shows participants' mean scores, standard deviations, and minimum and maximum scores for every measure used in the study. Table 2 shows means and standard deviations separately for men and women on each measure and independent-sample t-tests for gender differences for each measure. As the table shows, women in this study reported receiving significantly more social support from their friends ( $t = -2.04, p < .05$ ) and self-disclosing more in their romantic relationships ( $t = -2.29, p < .05$ ) than did men. Women also reported significantly *lower* inclusion of other in self for their romantic relationships than did men ( $t = 2.97, p < .01$ ). There were no other significant gender differences for any of the remaining measures.

The means from Tables 1 and 2 are comparable to available norms reported for each measure. For example, Cross et al. (2000) reported means for the Relational Interdependent Self-Construal of 54 – 57 across six undergraduate samples, compared to a mean of 55 for the present study. The difference in interdependent self-construal between participants in this study and participants in the normative studies was not significant ( $t = -.70, p > .05$ ). They also reported means of 55 – 59 for women and 51 – 54 for men, with women scoring significantly higher than men in every sample. The means in the current sample were comparable (55 for women and 53 for men) to Cross et al.'s sample, with no significant differences between this sample and the normative sample ( $t = -1.44, p > .05$  for women,  $t = .03, p > .05$  for men). However, contrary to Cross et al.'s findings, no significant gender difference in interdependent self-construal was found in this study.

Participants in the current study were also similar to the norm groups for the

Table 1

**Descriptive Statistics for Each Study Measure**

Measure	Mean	SD	Min.	Max.
<b>Time 1</b>				
RISC (n=201)	54.50	11.00	18.00	77.00
<b>Time 2</b>				
DAS (n=202)	109.03	12.30	67.00	132.00
MAS (n=202)	17.97	4.07	9.00	27.00
SPSpart (n=202)	41.79	4.36	29.00	48.00
SPSfr (n=202)	17.25	2.37	8.00	20.00

**Note.** RISC is the Relational-Interdependent Self-Construal Scale, DAS is the Dyadic Adjustment Scale, MAS is the Marriage Alternatives Scale, SPSpart is the Social Provisions Scale – Partner, SPSfr is the Social Provisions Scale – Friend, SPSprnt is the Social Provisions Scale – Parent, EDISC is the Emotional Self-Disclosure Scale, SDS is the Self-Disclosure Scale, SI2 is the Satisfaction Index at Time 2, RCI is the Relationship Closeness Inventory, IOS is Inclusion of Other in Self Scale, IDEP is Interpersonal Dependency, SI3 is the Time 3 Satisfaction Index, IES is the Impact of Event Scale, CESD is the Center for Epidemiological Studies – Depression Scale, CBI3 is Core Bereavement Items at Time 3, and CBIRR is a Core Bereavement Items Retrospective Report.

\* =  $p < .05$ , \*\* =  $p < .01$

Table 1

Continued

Measure	Mean	SD	Min.	Max.
<b>Time 2</b>				
SPSprnt (n=202)	17.63	2.75	5.00	20.00
EDISC (n=202)	103.16	15.33	55.00	120.00
SDS (n=202)	48.47	10.78	21.00	76.00
SI2 (n=202)	65.28	10.71	11.00	77.00
RCI (n=202)	16.19	4.62	4.00	25.00
IOS (n=201)	4.84	1.45	1.00	7.00
IDEP (n=202)	64.99	11.53	40.00	97.00
<b>Time 3</b>				
SI3 (n=87)	67.64	6.22	52.00	77.00
IES (n=21)	17.91	14.40	0.00	49.00
CESD (n=21)	9.05	11.33	0.00	42.00
CBI3 (n=21)	12.14	9.35	2.00	40.00
CBIRR (n=21)	23.38	10.25	6.00	40.00

Table 2

Descriptive Statistics for Men and Women and Gender Differences on each Study Measure

Measure	<u>M</u> for Men	<u>M</u> for Women	<u>T</u>
<b>Time 1</b>			
RISC	53.08 (n=59)	55.21 (n=143)	-1.23
<b>Time 2</b>			
DAS	108.75 (n=59)	109.25 (n=143)	-.26
MAS	17.07 (n=59)	18.31 (n=143)	-1.94
SPSpart	42.14 (n=59)	41.71 (n=143)	.63
SPSfr	16.72 (n=59)	17.48 (n=143)	-2.04*

**Note.** RISC is the Relational-Interdependent Self-Construal Scale, DAS is the Dyadic Adjustment Scale, MAS is the Marriage Alternatives Scale, SPSpart is the Social Provisions Scale – Partner, SPSfr is the Social Provisions Scale – Friend, SPSprnt is the Social Provisions Scale – Parent, EDISC is the Emotional Self-Disclosure Scale, SDS is the Self-Disclosure Scale, SI2 is the Satisfaction Index at Time 2, RCI is the Relationship Closeness Inventory, IOS is Inclusion of Other in Self Scale, and IDEP is Interpersonal Dependency. SI3 is the Time 3 Satisfaction Index, IES is the Impact of Event Scale, CESD is the Center for Epidemiological Studies – Depression Scale, CBI3 is Core Bereavement Items at Time 3, and CBIRR is a Core Bereavement Items Retrospective Report.

\* =  $p < .05$ , \*\* =  $p < .01$

Table 2

Continued

Measure	<u>M</u> for Men	<u>M</u> for Women	<u>T</u>
<b>Time 2</b>			
SPSprnt	17.96 (n=59)	17.54 (n=143)	.98
EDISC	101.40 (n=59)	103.91 (n=143)	-1.04
SDS	45.72 (n=59)	49.57 (n=143)	-2.29*
SI2	65.65 (n=59)	65.10 (n=143)	.32
RCI	16.95 (n=59)	15.86 (n=143)	1.51
IOS	5.33 (n=59)	4.67 (n=143)	2.97**
IDEP	63.79 (n=59)	65.31 (n=143)	-.84
<b>Time 3</b>			
SI3	69.19 (n=21)	67.08 (n=64)	1.34
IES	17.50 (n=2)	17.95 (n=19)	-.04
CESD	2.00 (n=2)	9.79 (n=19)	-.92
CBI3	15.50 (n=2)	11.79 (n=19)	.52
CBIRR	21.00 (n=2)	23.63 (n=19)	.43

Interpersonal Dependency Inventory (Hirschfeld et al., 1997) and the Satisfaction Index (Simpson, 1987). Hirschfeld et al. reported a mean from their college student normative group of 69, compared to 65 for the present study. Thus, participants in this study reported significantly less interpersonal dependency than did the normative group ( $t = -4.95, p < .05$ ). Simpson's college students normative groups produced means of 60 – 66 for women and 58 – 65 for men, compared to 65 for women and 66 for men in the current study. The female participants in the present study reported being significantly more satisfied with their relationship at Time 2 than did females in the normative group ( $t = 2.33, p < .05$ ). There was no significant difference between males in this study and males in the normative group ( $t = 2.29, p > .05$ ).

Finally, participants in the current study were also similar to the norm groups for the Social Provisions Scale (Cutrona & Russell, 1987). Specifically, a group of 149 married or cohabiting college students produced a mean of 42 on the Social Provisions Scale – Partner version (Cutrona, 1996a), identical to the mean produced by the sample in this study ( $\underline{m} = 42$ ). Participants in this study, however, reported receiving more social support from their friends ( $\underline{m} = 17$ ) and from their parents ( $\underline{m} = 18$ ) than did the norm group of pregnant and non-pregnant adolescent girls ( $\underline{m} = 16$  for friends,  $\underline{m} = 14$  for parents; Cutrona, 1989). Compared to the norm group, then, the participants in this study were receiving significantly more social support from their friends ( $t = 8.98, p < .001$ ) and from their parents ( $t = 16.28, p < .001$ ). Comparable normative data was not available for any of the other Time 2 measures.

Comparative normative data was available for depression and Time 3 grief measures. Comparison of the current sample mean ( $M = 9.05$ ) to the norm groups for the Center for Epidemiologic Studies – Depression Scale revealed that the current sample was comparable

to randomly selected field participants ( $M = 9.25$ ; Radloff, 1977), a difference that was not significant ( $t = -.081$ ,  $p > .05$ ). Thus, current study participants who had experienced the recent break up of a romantic relationship did not suffer more depressive symptoms on average than randomly selected community members.

However, comparison of current study means to norms for the grief measures used did reveal that participants whose relationships broke up experienced grief similar to that of samples bereaved by the death of a loved one. Horowitz, Wilner, and Alvarez (1979) reported means for their Impact of Event Scale of 21 for individuals bereaved by the death of a parent who had sought and were receiving outpatient therapy and 14 for field subjects bereaved by the death of a parent who had not sought counseling. Participants in this study fell in-between these two groups ( $m = 18$ ), but did not differ significantly from either group ( $t = -.99$  for the therapy group,  $t = 1.24$  for the field subjects), indicating that they were experiencing significant grief after their break ups. In addition, although lack of specific scoring information prevented directly comparable information for the Core Bereavement Items (Burnett et al., 1997), the means for Burnett et al.'s sample of bereaved spouses, adult children, and parents appear similar to the current study's mean of 24 for the retrospective report of grief immediately following the break up.

#### Differences between Individuals who Participated at Time 3 and Those Who Did Not

Table 3 shows mean scores and standard deviations on each Time 1 and Time 2 measure for the 108 individuals who participated in the follow-up and the 94 individuals who did not and independent sample t-tests of differences for each measure. As shown in the table, the only significant difference between the two groups was that those who participated in the follow-up study had significantly higher relationship quality at Time 2, as measured by

Table 3

Differences between Those who Participated at Time 3 and Those Who Did Not

Measures	Participated M (SD) (n = 108)	Did Not Participate M (SD) (n = 94)	T
Time 1			
RISC	54.89 (11.07)	54.95 (10.96)	.54
Time 2			
DAS	110.74 (12.57)	107.06 (11.75)	2.14*
MAS	17.85 (4.05)	18.10 (4.10)	-.43
SPSpart	42.14 (4.30)	41.38 (4.40)	1.23
SPSfr	17.40 (2.48)	17.09 (2.42)	.94
SPSprnt	17.56 (2.83)	17.72 (2.67)	-.432
EDISC	104.79 (14.46)	101.29 (16.16)	1.63

**Note.** RISC is the Relational-Interdependent Self-Construal Scale, DAS is the Dyadic Adjustment Scale, MAS is the Marriage Alternatives Scale, SPSpart is the Social Provisions Scale – Partner, SPSfr is the Social Provisions Scale – Friend, SPSprnt is the Social Provisions Scale – Parent, EDISC is the Emotional Self-Disclosure Scale, SDS is the Self-Disclosure Scale, SI2 is the Satisfaction Index at Time 2, RCI is the Relationship Closeness Inventory, IOS is Inclusion of Other in Self Scale, and IDEP is Interpersonal Dependency.

\*  $p < .05$     \*\*  $p < .01$

Table 3

Continued

Measures	Participated <u>M (SD)</u> (n = 108)	Did Not Participate <u>M (SD)</u> (n = 94)	t
Time 2			
SDS	49.36 (10.64)	47.46 (10.91)	1.25
SI2	65.21 (10.39)	65.35 (11.12)	-0.09
RCI	15.87 (5.11)	16.55 (3.99)	-1.06
IOS	5.00 (1.27)	4.64 (1.63)	1.71
IDEP	63.88 (11.11)	66.27 (11.92)	-1.47

the Dyadic Adjustment Score, than those who did not participate in the study ( $t = 2.14$ ,  $p < .05$ ). Thus, it is possible that individuals who did not participate in the follow-up study were more likely to have broken up than individuals who did participate. This could partially explain the small number of participants who had broken up at the follow-up.

### Differences between Participants who Broke Up and Participants who Stayed Together at Time 3

Mean scores and standard deviations on each Time 1 and Time 2 measure for the 21 participants whose relationships had broken up and the 87 participants whose relationships stayed together at Time 3 as well as independent t-tests of differences for each measure are shown in Table 4. As shown in the table, participants whose relationships had broken up at Time 3 reported significantly higher perceived alternatives to the relationship ( $t = -2.79$ ,  $p < .01$ ) and significantly lower inclusion of other in self for their romantic relationships at Time 2 ( $t = 3.20$ ,  $p < .01$ ) than did participants whose relationships stayed together.

### Correlations among Time 1, Time 2, and Time 3 Variables

Correlations, and corresponding 95% confidence intervals, between Time 1 (RISC) and Time 2 variables (listed in the table note) are reported in Table 5. As shown in the table, the RISC was significantly correlated ( $p < .05$ ) with the Dyadic Adjustment Scale (DAS), Social Provisions Scale – Partner (SPSpart), Social Provisions Scale – Friend (SPSfr), Social Provisions Scale – Parent (SPSprnt), Satisfaction Index – Time 2 (SI2), and the Relationship Closeness Inventory (RCI). Confidence intervals reveal that there is a 95% chance that each of these significant correlations do not equal zero. Correlations among Time 2 variables are shown in Appendix O.

Correlations, and corresponding 95% confidence intervals, between Time 1 (RISC)

Table 4

**Differences between Participants who Broke up and Participants who Stayed Together**

<b>Measures</b>	<b>Broke Up M (SD) (n = 21)</b>	<b>Stayed Together M (SD) (n = 87)</b>	<b>t</b>
<b>Time 1</b>			
RISC	54.81 (11.16)	54.90 (11.11)	.04
<b>Time 2</b>			
DAS	106.57 (13.48)	111.74 (12.21)	1.71
MAS	20.00 (3.66)	17.33 (3.98)	-2.79**
SPSpart	41.10 (4.61)	42.39 (4.22)	1.24
SPSfr	17.48 (2.77)	17.38 (2.43)	-.16
SPSprnt	17.29 (2.99)	17.62 (2.80)	.49
EDISC	102.00 (14.00)	105.46 (14.57)	.98

**Note.** RISC is the Relational-Interdependent Self-Construal Scale, DAS is the Dyadic Adjustment Scale, MAS is the Marriage Alternatives Scale, SPSpart is the Social Provisions Scale – Partner, SPSfr is the Social Provisions Scale – Friend, SPSprnt is the Social Provisions Scale – Parent, EDISC is the Emotional Self-Disclosure Scale, SDS is the Self-Disclosure Scale, SI2 is the Satisfaction Index at Time 2, RCI is the Relationship Closeness Inventory, IOS is Inclusion of Other in Self Scale, and IDEP is Interpersonal Dependency.

\*  $p < .05$     \*\*  $p < .01$

Table 4

Continued

Measures	Broke Up M (SD) (n = 21)	Stayed Together M (SD) (n = 87)	t
Time 2			
SDS	46.90 (9.54)	49.94 (10.86)	1.18
SI2	63.71 (8.56)	65.58 (10.80)	.735
RCI	14.33 (4.96)	16.24 (5.10)	1.54
IOS	4.24 (1.26)	5.18 (1.21)	3.20**
IDEP	61.38 (12.20)	64.48 (10.83)	1.15

Table 5

Correlations between RISC (Time 1) and Time 2 Variables

	RISC	
	Correlations	95% Confidence Intervals
DAS	.211**	[.08, .34]
MAS	-.086	[-.23, .05]
SPSpart	.236**	[.10, .37]
SPSfr	.178*	[.04, .31]
SPSprnt	.147*	[.01, .29]
EDISC	.130	[-.01, .27]
SDS	.094	[-.04, .23]
SI2	.166*	[.03, .31]

**Note.** RISC is the Relational-Interdependent Self-Construal Scale, DAS is the Dyadic Adjustment Scale, MAS is the Marriage Alternatives Scale, SPSpart is the Social Provisions Scale – Partner, SPSfr is the Social Provisions Scale – Friend, SPSprnt is the Social Provisions Scale – Parent, EDISC is the Emotional Self-Disclosure Scale, SDS is the Self-Disclosure Scale, SI2 is the Satisfaction Index at Time 2, RCI is the Relationship Closeness Inventory, IOS is Inclusion of Other in Self Scale, and IDEP is Interpersonal Dependency.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 5

Continued

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	RISC	
	Correlations	95% Confidence Intervals
	<hr/>	<hr/>
RCI	.146*	[.01, .29]
IOS	.078	[-.06, .22]
IDEP	-.009	[-.15, .13]

---

and Time 3 variables (listed in the table note) are reported in Table 6. As shown in the table, RISC (Relational-Interdependent Self-Construal) was significantly correlated with SI3 (Satisfaction Index – Time 3,  $r = .251$ ,  $p < .05$ ). This indicates a relationship of medium magnitude (Cohen, 1987) between relational interdependent self-construal at Time 1 and relationship satisfaction at Time 3. Correlations among Time 3 variables are shown in Appendix N.

Correlations, and corresponding 95% confidence intervals, between Time 2 and Time 3 (listed in the table note) variables are reported in Table 7. Satisfaction Index at Time 3 (SI3) was significantly ( $p < .01$ ) correlated with the Time 2 Dyadic Adjustment Scale (DAS), Marriage Alternatives Scale (MAS), Social Provisions Scale – Partner (SPSpart), Emotional Self-Disclosure (EDISC), Satisfaction Index – Time 2 (SI2), Inclusion of Other in Self Scale (IOS) and with ( $p < .05$ ) Social Provisions Scale – Friend (SPSfr) and Social Provisions Scale – Parent (SPSprnt). The Impact of Event Scale (IES) at Time 3 was significantly correlated with the Marriage Alternatives Scale (MAS,  $p < .05$ ) at time 2. Core Bereavement Items at Time 3 (CBI3) was significantly correlated with Interpersonal Dependency (IDEP,  $p < .05$ ) and the Marital Alternatives Scale (MAS,  $p < .05$ ) at Time 2.

#### Statistical Power

Given the small sample sizes of the group of students whose relationships broke up ( $n = 21$ ) and the group whose relationships stayed together ( $n = 87$ ), it is important to conduct analyses to determine the statistical power available to detect population correlations. In the sample of 87 participants whose relationships stayed together, the power to detect a medium sized correlation of .30 in the population with 80% probability is .84. Thus, the sample size

Table 6

Correlations between RISC (Time 1) and Time 3 Variables

	RISC	
	Correlations	95% Confidence Intervals
SI3 n = 87 (remained together)	.251*	[.04, .44]
IES n = 21 (broke up)	-.408	[-.72, .03]
CESD n = 21 (broke up)	-.322	[-.66, .13]
CBI3 n = 21 (broke up)	-.345	[-.68, .10]
CBIRR n = 21 (broke up)	.106	[-.35, .52]

Note. RISC is the Relational-Interdependent Self-Construal Scale, SI3 is the Time 3

Satisfaction Index, IES is the Impact of Event Scale, CESD is the Center for Epidemiological

Studies – Depression Scale, CBI3 is Core Bereavement Items at Time 3, and CBIRR is a

Core Bereavement Items Retrospective Report.

\*  $p < .05$ . \*\*  $p < .01$

Table 7

**Correlations between Time 2 and Time 3 Variables**

Time 3	SI3 (n = 87)		IES		CESD		CBI3 (n = 21)		CBIRR	
	Corr.	95%CI	Corr.	95%CI	Corr.	95%CI	Corr.	95% CI	Corr.	95% CI
Time 2										
DAS	.650**	[.31,.85]	.141	[-.31,.51]	-.126	[-.53,.33]	-.047	[-.47,.39]	.235	[-.22,.61]
MAS	-.340**	[-.52,-.14]	-.512*	[-.78,-.10]	-.257	[-.62,.20]	-.455*	[-.75,-.03]	-.340	[-.68,.11]
SPSpart	.465**	[.04,.76]	.041	[-.40,.46]	-.256	[-.62,.20]	-.256	[-.40,.47]	.344	[-.10,.68]

**Note.** DAS is the Dyadic Adjustment Scale, MAS is the Marriage Alternatives Scale, SPSpart is the Social Provisions Scale – Partner, SPSfr is the Social Provisions Scale – Friend, SPSprnt is the Social Provisions Scale – Parent, EDISC is the Emotional Self-Disclosure Scale, SDS is the Self-Disclosure Scale, SI2 is the Satisfaction Index at Time 2, RCI is the Relationship Closeness Inventory, IOS is the Inclusion of Other in Self Scale, and IDEP is Interpersonal Dependency, SI3 is the Satisfaction Index at Time 3, IES is the Impact of Event Scale, CESD is the Center for Epidemiological Studies – Depression Scale, CBI3 is Core Bereavement Items at Time 3, and CBIRR is the Core Bereavement Items Retrospective Report. \* p < .05. \*\* p < .01.

Table 7

Continued

Time 3	SI3		IES		CESD		CBI3		CBIRR	
	Corr.	(n = 87) 95%CI	Corr.	95%CI	Corr.	95%CI	Corr.	(n = 21) 95% CI	Corr.	95% CI
Time 2										
SPSfr	.342*	[.14,.52]	-.040	[-.46,.40]	.012	[-.43,.44]	-.130	[-.53,.32]	-.026	[-.46,.43]
SPSprnt	.224*	[.01,.42]	-.321	[-.67,.13]	-.139	[-.54,.31]	-.193	[-.58,.27]	-.245	[-.62,.21]
EDISC	.333**	[.13,.51]	-.073	[-.50,.38]	-.401	[-.72,.04]	-.153	[-.56,.31]	.182	[-.28,.58]
SDS	.074	[-.38,.50]	.090	[-.36,.50]	-.021	[-.45,.42]	.012	[-.43,.44]	-.053	[-.48,.39]
SI2	.413**	[.23,.58]	-.119	[-.53,.33]	-.415	[-.72,.02]	-.228	[-.60,.23]	.283	[-.17,.64]
RCI	.190	[-.27,.58]	-.159	[-.56,.29]	-.012	[-.44,.43]	-.055	[-.48,.39]	-.073	[-.50,.38]
IOS	.305**	[.10,.42]	.136	[-.32,.54]	-.204	[-.59,.26]	-.118	[-.53,.33]	-.038	[-.46,.40]
IDEP	-.233*	[-.43-.02]	.295	[-.16,.65]	.420	[-.01,.73]	.494*	[.08,.80]	.110	[-.34,.52]

of participants who did not experience a break up is sufficient to detect medium to large effects in the population.

In the sample of 21 participants whose relationships broke up, the power to detect a medium sized correlation of .30 in the population with 80% probability is only .26. A sample size of 80 or more would be required to yield a significant result with 80% probability if the population correlation is .30. In addition, with a sample of 21 participants, a population correlation of .54 would be required to yield a significant result with 80% probability. Therefore, the sample size of participants who experienced a relationship break up is not sufficient to detect medium to large effects in the population.

#### Grief and Depression in Participants Who Had Experienced a Break-Up by Time 3

The 21 participants who had experienced a break-up by Time 3 had been dating their partners an average of 19.62 months ( $SD = 15.51$ ), with a range of 4 - 54 months. Their relationship had ended an average of 9.38 ( $SD = 5.19$ ) weeks prior to Time 3, with a range of 1 – 20 weeks. Of the 21 participants who had broken-up by Time 3, 12 said they initiated the break-up, 3 said their partner initiated the break-up, and 6 said the decision was mutual. A total of 8 participants indicated that they were involved in a new romantic relationship at Time 3. Only 2 of the Time 3 participants were male, while 19 of the participants were female.

As shown in Table 6, the correlations between the Relational-Interdependent Self-Constraint Scale and the Impact of Event Scale ( $r = -.408, p > .05$ ), Core Bereavement Items at Time 3 ( $r = -.345, p > .05$ ), Core Bereavement Items Retrospective Report ( $r = .106, p > .05$ ), and Center for Epidemiological Studies - Depression Scale ( $r = -.322, p > .05$ ) were all non-significant. In addition, although the magnitude of three of these correlations is

moderate, due to the small sample size of 21, the 95% confidence interval includes zero, indicating that there may not be a significant relationship between relational interdependent self-construal and grief and depression.

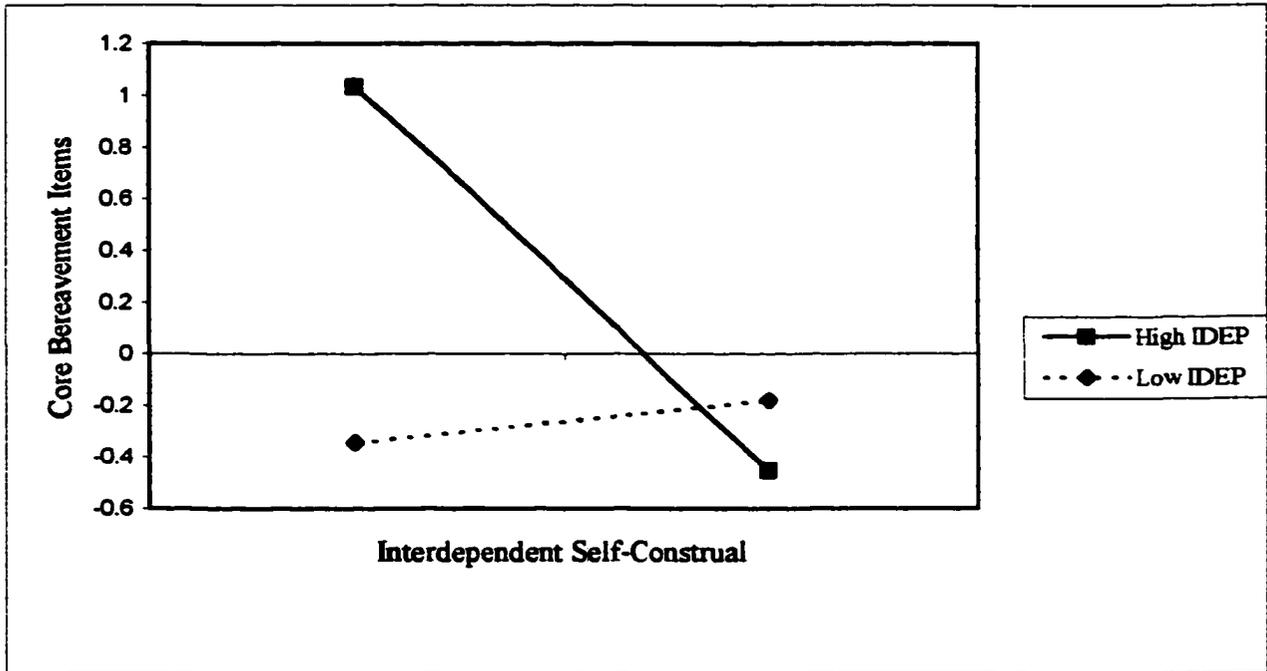
#### Moderation of the Relationship between Interdependent Self-Construal and Grief and Depression

This study was originally designed to test numerous variables as mediators between the independent variable of interdependent self-construal and the dependent variables of grief and depression. However, because the relationships between interdependent self-construal and grief and depression were not statistically significant, an important criterion for mediation was not met and no further tests for mediation between interdependent self-construal and the outcome measures of grief and depression were conducted.

One variable, interpersonal dependency, was tested as a *moderator* of the relationship between interdependent self-construal and grief and depression. Interpersonal dependency (IDEP) was found to be a significant moderator of the relationship between Relational Interdependent Self-Construal (RISC) and the Core Bereavement Items at Time 3 (CBI3;  $F(1, 17) = 14.57, p < .01$ ). The interaction is shown in Figure 3. Examination of this interaction revealed that when Interpersonal Dependency was one standard deviation above the mean, there was a strong negative relationship between Relational Interdependent Self-Construal and the Core Bereavement Items at Time 3 ( $b = -0.93$ ). The relationship was a weak positive one when Interpersonal Dependency was one standard deviation below the mean ( $b = 0.11$ ). Therefore, contrary to the initial prediction, the combination of high interpersonal dependency and high interpersonal self-construal was associated with lower grief after the breakup of a relationship.

Figure 3

Interaction between Interdependent Self-Constraint and Interpersonal Dependency for the Core Bereavement Items at Time 3



Interpersonal dependency (IDEP) was also shown to be a significant moderator of the relationship between Relational Interdependent Self-Construal (RISC) and grief as measured by the Impact of Event Scale (IES;  $F(1, 17) = 4.65, p < .05$ ). The interaction is shown in Figure 4. Examination of this interaction revealed that when Interpersonal Dependency was one standard deviation above the mean, there was a large negative relationship between Relational Interdependent Self-Construal and grief as measured by the Impact of Event Scale ( $b = -0.84$ ). The relationship was much weaker when Interpersonal Dependency was one standard deviation below the mean ( $b = -0.07$ ). Therefore, the combination of high interpersonal dependency and high interpersonal self-construal was associated with lower grief after the breakup of a relationship. Interpersonal dependency was not shown to be a significant moderator of the relationship between interdependent self-construal and the Core Bereavement Items Retrospective Report and between interdependence and depression.

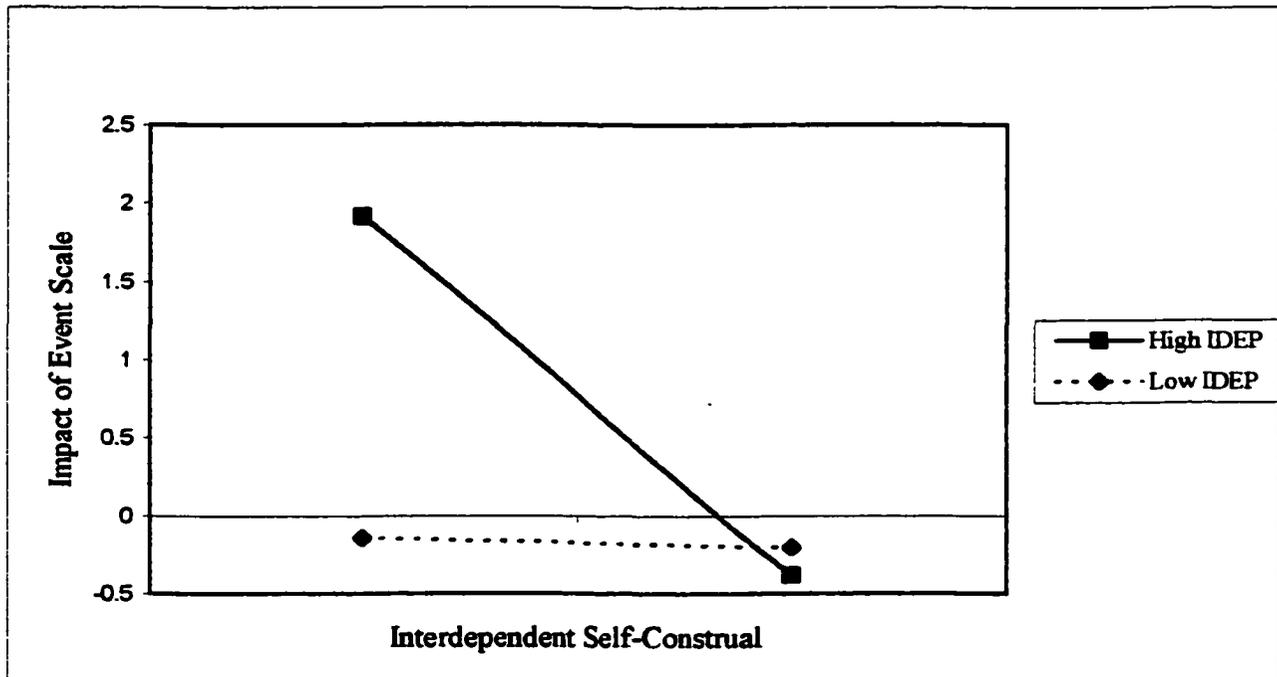
#### Relationship Satisfaction in Participants Involved in the Same Romantic Relationship at Time 3

At Time 3, 87 of the 108 follow-up participants were still involved in the same romantic relationship as at Times 1 and 2, having dated their partner for an average of 23.6 months ( $SD = 14.55$ ), with a range of 4-66 months. There were 64 female and 21 male Time 3 participants whose relationships stayed together (data were missing for 2 participants) and the mean age of participants at Time 3 was 19.26 ( $SD = 2.48$ ), with a range of 17-42.

As previously discussed, there was a significant positive relationship of medium magnitude between interdependent self-construal (RISC) at Time 1 and Satisfaction (SI3) at Time 3 ( $r = .251, p < .05$ ). Thus, the more the self-concept includes an emphasis on relationships, the higher the relationship satisfaction. The following Time 2 variables were

Figure 4

Interaction between Interdependent Self-Construal and Interpersonal Dependency for the Impact of Event Scale



tested for mediation: social support from partner, emotional self-disclosure, self-disclosure, relationship quality, interpersonal dependency, and relationship closeness.

There were two variables that met all of the criteria for mediation of the relationship between interdependent self-construal and satisfaction. As reported above, a series of three regression equations was used to test for mediation for each variable. Using these regression equations, perceived social support from partner was found to be a significant mediator of the relationship between interdependent self-construal and relationship satisfaction at Time 3. In the first regression equation, in which social support from partner was regressed on interdependent self-construal, interdependent self-construal was found to be significantly related to social support from partner ( $F(1, 199) = 11.70, p < .01$ ). In the second regression equation, in which relationship satisfaction was regressed on interdependent self-construal, interdependent self-construal was found to be significantly related to relationship satisfaction ( $F(1, 84) = 5.63, p < .05$ ). In the third equation, in which relationship satisfaction was regressed on both interdependent self-construal and social support from partner, relationship satisfaction was found to be significantly related to social support from partner ( $F(1, 84) = 27.12, p < .001$ ). In addition, the effect of interdependent self-construal on relationship satisfaction was decreased in strength with the addition of social support from partner to the equation ( $\beta$  was reduced from .251 to .100). Results of this regression analysis are shown in Table 8.

Relationship quality, as measured by the Dyadic Adjustment Scale (Spanier, 1976), was also shown to be a significant mediator of the relationship between interdependent self-construal and relationship satisfaction. In the first regression equation, interdependent self-construal was found to be significantly related to relationship quality ( $F(1, 199) = 9.26, p <$

Table 8

**Hierarchical Multiple Regression Predicting Time 3 Relationship Satisfaction from Time 1 RISC and Time 2 Social Support from Partner**

	<b><u>B</u></b>	<b><u>SE B</u></b>	<b><u>β</u></b>
Step 1			
<u>RISC</u>	.248	.105	.251*
Step 2			
<u>RISC</u>	.099	.099	.100
<u>SPSpart</u>	.483	.105	.461**

Note.  $\Delta R^2 = .244$ ,  $F(1, 84) = 27.12$ ,  $p < .01$ . RISC is the Relational Interdependent Self-  
 Construal Scale, SPSpart is the Social Provisions Scale – Partner Scale.

\* $p < .05$     \*\* $p < .01$

.01). In the second regression equation, interdependent self-construal was found to be significantly related to relationship satisfaction ( $F(1, 84) = 5.63, p < .05$ ). In the third equation, relationship quality was found to be significantly related to relationship satisfaction ( $F(1, 84) = 82.24, p < .001$ ). In addition, the effect of interdependent self-construal on relationship satisfaction was decreased in strength with the addition of relationship quality to the equation ( $\beta$  was reduced from .251 to -.003). Results of this regression analysis are shown in Table 9. The Self-Disclosure Scale, Emotional Self-Disclosure Scale, Interpersonal Dependency Scale, Marriage Alternatives Scale, and Relationship Closeness Total, Strength, and Frequency scales were not found to be significant mediators of the relationship between interdependent self-construal and relationship satisfaction.

Table 9

**Hierarchical Multiple Regression Predicting Time 3 Relationship Satisfaction from Time 1  
RISC and Time 2 Relationship Quality**

	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1			
<u>RISC</u>	.248	.105	.251*
Step 2			
<u>RISC</u>	-.003	.083	-.003
<u>DAS</u>	.733	.087	.705**

Note.  $\Delta R^2 = .495$ ,  $F(1, 84) = 82.24$ ,  $p < .01$ . RISC is the Relational Interdependent Self-  
Construal Scale, DAS is the Dyadic Adjustment Scale.

\* $p < .05$     \*\* $p < .01$

## DISCUSSION

This study was designed to test a mediational model whereby relational interdependent self-construal leads to better romantic relationships, which in turn leads to increased grief and depression after the break up of a romantic relationship. The study was motivated by the literature on disenfranchised grief in which the grief reactions of young people who have experienced the break up of a romantic relationship are generally not recognized nor validated by their friends and families (Robak & Weitzman, 1995; Sorenson et al., 1993). The initial purpose of this study, therefore, was to replicate the findings (Gray & Shields, 1992; Wiseman, 1975) that young adults experience grief after relationship termination and to examine individual and relationship differences that affect the intensity of their grief reactions. The research literature on self-construal type, interdependent self-construal in particular, revealed that self-construal type has multiple implications for relationships (Cross and Madson, 1997) but that its potential influence on grief after relationship break up had not yet been examined. In order to examine the way in which interdependent self-construal may influence grief after relationship termination, several relationship and individual mediator variables were included in the model. Two additional outcome variables were added: depression was added as an additional measure of distress after break up and relationship satisfaction was added to enable me to gather follow-up data from participants whose relationships stayed together.

The original model therefore, included several interesting research questions pertaining to the relationship between interdependent self-construal and grief, depression, and relationship satisfaction. To test these questions, the study design was longitudinal to avoid retrospective reports of grief while still maximizing the number of participants who

had broken up. Despite these precautions, the sample size of participants who had experienced a relationship break up by the time of follow-up was still too small to provide sufficient statistical power to detect small to moderate effect sizes. Although previous studies found break-up rates for college students of 35 - 42% over a 9 - 12 month period (Berscheid et al., 1989a; Sprecher, 1994), only 19% of participants in the current study had broken-up by the time of the follow-up.

The low number of participants whose relationships had broken up may have been due to a time period (5 – 7 months) that was too brief. Alternatively, it may be that those whose relationships had broken up were less likely to participate in the follow-up, as the study was described to potential participants at that time as a study about romantic relationships. The finding that individuals who did not participate in the follow-up study reported significantly lower relationship quality on average at Time 2 than did those who went on to participate supports this hypothesis, as participants who reported low relationship quality are more likely to have their relationships break up.

In addition to the small sample size of participants whose relationships had broken up, only two of these participants were male. One reason for the small number of males who had broken up by follow-up is that there were fewer males than females involved in every stage of the research, including the sample at Time 2 as well as the sample of participants whose relationships stayed together. However, males made up 29% of the sample at Time 2 and 25% of the sample whose relationships stayed together, but only 10% of the sample whose relationships broke up. Thus, it may have been that males whose relationships had broken up were more reluctant to participate in the follow up, possibly because they are not as comfortable with disclosing their feelings as are females (Cross & Madson, 1997).

Regardless of the cause of the small sample size, the result was that there was not enough statistical power in the sample of those who experienced a break up to detect medium to large relationships among variables. The small number of males whose relationships had broken up also made analysis of gender differences impossible in this sample. Nevertheless, there is still interesting information that can be gleaned from these analyses, which is discussed below in light of the initial study hypotheses and relevant literature.

### Interdependent Self-Construal

This study hypothesized that interdependent self-construal would be positively associated with grief, on the basis that individuals who include relationships in their self-concept would be more severely affected by the break up of a significant relationship. It was also hypothesized that, because of the associated emphasis on relationships, interdependent self-construal would be positively related to relationship closeness, relationship quality, relationship satisfaction, perceived social support, and self-disclosure, and negatively related to perceived relationship alternatives.

Although the original hypotheses did not include a predication about the relationship between gender and interdependent self-construal, based on prior research (e.g. Cross & Madson, 1997; Cross et al., 2000) I assumed that gender differences in interdependent self-construal would emerge. Surprising, then, was the finding of no significant gender differences in interdependent self-construal in the current study. In addition, women in this sample scored on the low end of the normative range for interdependent self-construal reported by Cross et al. (2000) and men scored on the high end of the normative range. Because gender differences in interdependent self-construal were found across six separate samples in Cross et al.'s study, it points to something unique about the sample in the current

study. The most likely explanation seems to be that the current sample was biased because of the selection procedure that was used. Participants in this study were selected because they indicated that they were currently involved in an exclusive dating relationship. Thus, college students who were not involved in a romantic relationship early in their first semester of college were not selected for inclusion in the study. According to S. Cross (personal communication, September 13, 2001), men tend to be less willing than women to participate in studies of relationships, and men who do participate tend to have higher interdependent self-construal than those who don't. Therefore, men who were higher on interdependent self-construal may have self-selected for this study, thus decreasing the range of scores on interdependent self-construal as well as the likelihood of finding gender differences.

Consistent with the initial hypothesis, interdependent self-construal was significantly positively related to relationship closeness as measured by the Relationship Closeness Inventory. Individuals with a high interdependent self-construal tended to report being involved in romantic relationships that were closer than those with low interdependent self-construal. This may be because individuals high on interdependent self-construal put significant time and energy into making their relationships close. These results are somewhat different than previous findings, in that Cross et al. (2000) found interdependent self-construal to be positively related only to the strength subscale of the Relationship Closeness Inventory, rather than total closeness as found in the current study. In addition, Cross et al. found a significant positive relationship between interdependent self-construal and closeness as measured by the Inclusion of Other Scale, which the current study did not replicate.

I also hypothesized that interdependent self-construal would be significantly related to relationship quality and relationship satisfaction, which the results of this study supported.

As with relationship closeness, the finding that people with interdependent self-construals tended to be satisfied with their relationships and to believe their relationships to be of high quality may be due to either their tendency to put more work into their relationships or to a tendency to simply report having higher satisfaction and relationship quality than those with low interdependent self-construals.

As expected, interdependent self-construal was also positively related to perceived social support from the partner, parents, and friends. This may be because individuals with a high interdependent self-construal are more likely to seek social support from others than are those with a low interdependent self-construal. Conversely, it is also possible that people who are used to getting more social support from the people in their lives may then begin to place more value and importance on their relationships. Thus, the direction of causality in the relation between interdependent self-construal and social support is not clear.

Contrary to predictions, interdependent self-construal was not significantly correlated with self-disclosure in the romantic relationship. This was contrary to initial predictions that individuals high on interdependent self-construal self-disclose more in their relationships. Failure to find a significant relationship may have to do with what type of self-disclosure that measures actually examined. Specifically, Cross and Madson (1997) suggest that there may actually be a difference between individuals with high interdependent self-construal and people with low interdependent self-construal not in the amount of self-disclosure, but in the type. They suggest that those with a high interdependent self-construal tend to engage in the sharing of thoughts and feelings while those with a low interdependent self-construal focus more on discussion of things like activities and sports. In support of this hypothesis, this study did produce a larger correlation between emotional self-disclosure and interdependent

self-construal than between standard self-disclosure and interdependence, although neither relationship was significant. Thus, the use of self-disclosure measures that assess different types of self-disclosure may more accurately reflect the nature of the relationship between interdependent self-construal and self-disclosure.

Finally, no significant positive relationship was found between interdependent self-construal and perceived availability of alternatives to the relationship. I hypothesized that individuals with high interdependent self-construals would have lower perceived relationship alternatives because they are focused more on making their current romantic relationship work. So, the degree to which individuals include their relationships to others in their self-concepts does not influence how many alternatives they might have to their relationship. Persons with an interdependent self-construal may also have better social skills and may be aware that they have the skills to have alternative relationships. This may counteract the tendency of some persons to ignore other options and concentrate on maximizing the quality of their current relationship. The net result may be no association between perceived access to alternatives and self-construal.

#### Grief and Depression after Relationship Break Up

Several conclusions can also be drawn from the results pertaining to grief and depression after relationship termination. First, it is clear from comparisons of means from this study to available norms that college students do experience grief after the break up of a romantic relationship similar to that of individuals bereaved by death. Labeling reactions after break up as simple “distress” does not accurately characterize the cognitive and affective grief responses that actually occur. Specifically, the grief measures used in this study revealed that those whose relationships had recently broken up reported thinking

frequently about, feeling emotional when encountering reminders of, and yearning for their ex-partner. Participants also experienced intrusion as well as avoidance of their grief responses. However, the grief participants experienced after break up appeared to dissipate relatively quickly, as evidenced by a lower mean score on the Core Bereavement Items at Time 3 than on their reports of grief during the time period immediately following the break up (an average of 9 weeks prior). Thus, although grief reactions may be intense immediately following the break up, they may decline more rapidly than would grief after the death of a loved one.

Examination of correlations between grief after break up and other variables revealed significant relationships with two variables. First, participants' grief was negatively associated with perceived dating alternatives, as was initially hypothesized. Thus, the more alternatives to their current romantic relationship individuals believed themselves to have, the less intense their grief after a break up was. In fact, high perceived relationship alternatives was one factor that discriminated between those who were likely to break up at a later time and those who were not. This result is similar to that found in another study of relationship stability (Felmlee et al., 1990). Relationship alternatives therefore appeared to be associated with a higher probability of romantic relationship termination as well as with experiencing less grief after the break up.

This result is consistent with Thibaut and Kelley's (1959) social exchange theory, which states that the comparison of the relationship to alternative relationships is an important determinant of commitment to the relationship. Rusbult's (1980) investment model of relationships also emphasizes the availability of alternative relationships as a predictor of lower investment in and commitment to a relationship. Therefore, individuals

who believe that they have other options for romantic relationships may feel less motivation to work hard to ensure that their existing relationship continues. Further, if they perceive these options as being more favorable than their current relationship, they may be less committed to and more likely to end the relationship. Conversely, as these results do not imply causation, people who are considering ending their romantic relationships and/or who believe the end is imminent may be more open to acknowledging or even creating alternatives. However, additional analyses revealed that the relationship between involvement in a new romantic relationship after break up and grief was not significant, indicating that it is the perception of having relationship alternatives, not the actual involvement in a new relationship, that has a significant impact on grief after break up.

Grief after relationship termination was also significantly positively associated with interpersonal dependency, as was initially hypothesized. Thus, individuals who were highly dependent on their relationships and who had low confidence that they could get their needs met outside of significant relationships tended to experience more intense grief reactions than those who were low on interpersonal dependency. The latter group of individuals may have more difficulty coping on their own and may believe themselves to be incapable of functioning without their romantic partner. This may then lead to increased grief after the break up of their romantic relationship. The finding that grief was positively associated with interpersonal dependency is consistent with other research that has linked high interpersonal dependency to loneliness and emotional disorders (Hirschfeld et al., 1977; Mahon, 1982). Results are also consistent with the hypothesis that interpersonal dependency constitutes a negative quality while interdependent self-construal is neutral to positive, as the relationship between self-construal and two of the three measures of grief is negative rather than positive.

In addition, although not significant, perceived social support from the romantic partner had a moderate size negative correlation with grief after break up, indicating that higher perceived social support from the partner was associated with lower levels of grief after relationship termination. This finding is contrary to the initial expectation that getting more support from the romantic partner during the relationship would make it more difficult to do without that support after the relationship ends, thus increasing the intensity of grief reactions. This unexpected result may be due to the fact that perceived social support from the romantic partner was positively correlated with perceived support from family and friends. Perceived support from family and friends was also negatively correlated with grief reactions after the break up. Therefore, individuals who received more support from their partners would also receive more support from others to help them through the break up and lessen their grief reactions.

Grief was not significantly correlated with relationship quality, self-disclosure, relationship satisfaction at time 2, or relationship closeness, and the magnitude of these correlations was small. Contrary to initial predictions, individuals who were satisfied with their relationships and who perceived their relationships to be of high quality, close, and high on self-disclosure did not experience more grief than people whose relationships were low on these variables. There is no easy explanation for these results, as they are contrary to both the available literature and to common sense. It may be that there are other variables (e.g. length of relationship) that moderate the relations between these variables and grief. Or it may be that if a larger sample size were used, the correlations would be different.

As noted above, the correlations between interdependent self-construal and grief and depression after relationship break up were not significant and corresponding confidence

intervals included zero. However, as the absolute magnitudes of the correlations for three of these relationships were moderate (Cohen, 1987) and because the sample size provided inadequate power to detect small or medium effects, it is worth discussing these tentative results. Perhaps the most striking feature of these results is that, contrary to the initial hypothesis, interdependent self-construal was negatively associated with grief and depression after break up. The initial review of the literature on self-construal type seemed to suggest that because individuals with high interdependent self-construal include relationships with others in their self-concept, the loss of a significant relationship would cause them significant grief because it would affect their way of viewing themselves. However, a second consideration of the literature reveals a possible explanation for the results found in this study, which is discussed below.

Individuals high on interdependent self-construal may experience less grief and depression after a break up than those low on interdependent self-construal because they are more likely to have a variety of relationships to rely on, rather than relying primarily on their romantic relationship (Cross & Madson, 1997a). Thus, when a break up of their romantic relationship occurs, individuals high on interdependent self-construal do not lose their sole source of emotional support. This may be especially crucial in recovering from the break up, as supportive friends and family could provide not only general support and companionship but may also serve as people with whom to talk about the break up. The availability of emotional support during this crucial time may serve to decrease grief and depression in these individuals. In contrast, people who are low on interdependent self-construal, because they focus less on relationships, may have fewer relationships outside of their romantic relationship on which to rely after the break up. These individuals therefore may not have

the emotional support needed to decrease their grief and depression. The finding that interdependent self-construal was positively associated with perceived social support from friends and family provides partial support for this hypothesis. In addition to having more perceived sources of social support, individuals with high interdependent self-construals may also utilize their support more than individuals with low interdependent self-construal.

The relationship between interdependent self-construal and grief was also shown to be moderated by interpersonal dependency. Specifically, when interpersonal dependency was high, interdependent self-construal was strongly negatively associated with grief after break up. In other words, the combination of high interpersonal dependency and high interdependent self-construal was associated with low grief after break-up. When interpersonal dependency was low, there was very little relationship between interdependent self-construal and grief. These results are contrary to the initial prediction that individuals high on both interdependent self-construal and interpersonal dependency would actually experience more grief after the break up because it would leave these individuals feeling that they are unable to get their needs met and it would affect their self-concept. However, it appears that interpersonal dependency actually intensifies the negative relationship between interdependent self-construal and grief. One possible explanation of this finding is again that people who are highly dependent on relationships and who include relationships in the self-construal would be more likely to have people outside of the romantic relationship to depend on for support to help them through the break up. It is also possible that the results are unique to the small sample, as interactions in small samples tend to be unstable and unreliable.

### Relationship Satisfaction

A secondary focus of the study was the effect of interdependent self-construal on relationship satisfaction among participants whose relationships did not break up. Results showed that interdependent self-construal was significantly positively related to relationship satisfaction at Time 3. Thus, those who tend to include their relationships with others in their self-concepts tend to have more satisfying romantic relationships.

As predicted, the relationship between interdependent self-construal and relationship satisfaction is mediated by other variables, specifically social support from the partner and relationship quality. Thus, interdependent self-construal leads to higher social support from the partner and higher relationship quality, which in turn leads to higher relationship satisfaction. These results make sense intuitively and are consistent with the literature. Those with higher interdependent self-construal are likely to attend more to, work harder in, and expect more from their relationships than those with lower interdependent self-construal. Specifically, individuals high on interdependent self-construal may provide more support to their partners, which may cause them to get more social support in return. Cross et al.'s (2000) finding that individuals high on interdependent self-construal provide more empathy to their partners, which in turn leads to them to receive more social support provides support for this hypothesis. These individuals may also be more likely to seek and stay in relationships that provide the social support they desire.

The effect of interdependent self-construal on relationship satisfaction was also mediated by relationship quality. This mediation effect indicates that one mechanism through which interdependent self-construal impacts relationship satisfaction is through the establishment of high quality romantic relationships. Those who have a high interdependent

self-construal may put more time, effort, and attention into their relationships, leading to increased relationship quality. Cross et al.'s (2000) results provide support for this hypothesis, finding that individuals who have high interdependent self-construal engaged in more behaviors that enhanced and maintained the relationship. Additionally, Van Lange et al. (1997) found that willingness to sacrifice in a relationship is associated with relationship quality and satisfaction. As individuals who have high interdependent self-construal are likely to be more willing to sacrifice in their relationships than those with low interdependent self-construal, it may be that willingness to sacrifice is a significant factor in determining relationship quality and satisfaction. Further research is needed to clarify the possible role of willingness to sacrifice in relationship quality.

#### Study Limitations

The most obvious limitation of this study is the small sample size, especially for those whose relationships had broken up, and the resultingly low statistical power. The limitations imposed by small sample size highlight the need to ensure larger sample sizes in future studies. This study suggests that sample size in studies of relationship break up may be increased by studying participants over a longer period of time (at least one year) and by providing incentives for individuals to participate in follow-up studies in order to avoid attrition of subjects with poor relationship quality. It also points to the need to report and discuss absolute magnitudes (e.g. correlations and effect sizes) in addition to results of significance testing, as the latter is highly dependent on sample size.

In addition, as with any study that uses self-report measures, the results of this study assume that participants accurately report on the measures, which may not have been the case because participants' present mood may have influenced their self-report. For example,

someone who had been arguing with their romantic partner prior to attending the testing session may have reported low relationship satisfaction, even though they may be highly satisfied with the relationship overall. This is especially problematic for the retrospective grief measure, as this relied both on participants' memories and on accurate reporting of their distress symptoms immediately following the break up, which had occurred 1 – 20 weeks prior. For example, individuals who were feeling better at the time of follow-up than they were immediately following the break up may have reported less retrospective grief than had actually occurred.

The sample in this study also lacked diversity, as it consisted primarily of freshmen, heterosexual, non-married, Caucasian college-students. The age of the participants make the application of study results especially narrow, as the nature of romantic relationships may change dramatically with increased age and maturity. A final limitation is that, as is true for most of the relationship break up and satisfaction literature, only one member of the relationship dyads was involved in the study. The participation of only one half of a couple makes it difficult to accurately assess the nature of the relationship, because results are biased by the reports of just one individual. So, for example, one partner in the relationship may feel fairly satisfied in the relationship and believe it to be of good quality while the other partner may be dissatisfied and actively examining other alternatives. Without the report, and possibly the objective observation of, both members of the dyad, the true nature of the relationship cannot be examined. Thus, it would be worthwhile to conduct a similar study with older, more diverse couples who are involved in more committed, long-term relationships, so as to examine how self-construal and grief after a relationship termination operate across a variety of individuals and relationships.

## CONCLUSIONS

### Implications and Recommendations for Future Research and Practice

The results of this study provide guidance for future research and clinical practice. For example, from the results of this study and others (e.g. Cross et al., 2000), the RISC has emerged as a valid, reliable, and distinct measure that should become a standard measure in studies of relationships. The construct of interdependent self-construal contributes to our understanding of significant relationships and seems to influence multiple relationship dimensions, including relationship closeness, quality, and satisfaction.

The results that the grief of college students who have experienced a recent break up is similar to that of individuals bereaved by death and that grief is at least somewhat distinct from depression also indicate that researchers studying the effects of relationship termination should include measures of grief, rather than just including general distress or depression measures. In fact, it could be argued that many researchers in the area have contributed to the disenfranchisement of grief (Doka, 1989; LeGrand, 1989) by not recognizing it as a relevant and valid response to relationship break up, especially among college students. The development of a measure of grief specifically designed for those whose relationships have broken up would be useful in helping future researchers to measure grief in this population.

Several questions for future research can be generated from the results of the present study. For example, the effects of participant selection criteria should be examined, as the primarily first year college students involved in this study may not be representative of young adult romantic relationships. Specifically of interest is whether individuals who have a low interdependent self-construal are less likely to be involved in committed romantic relationships and if they desire to be in a committed relationship or are happier just dating.

Further exploration of the relationship between interdependent self-construal and grief is also needed. For example, can the negative relationship between interdependent self-construal and grief be replicated in other samples? If so, what variables contribute to this relationship? Is it due to moderators such as social support or does interdependent self-construal itself act as a buffer against intense grief reactions? These and other questions pertaining to interdependent self-construal and grief call for further study.

The nature and course of grief in college students after relationship break up also merit further exploration. Does their course of grief mirror that of individuals bereaved by death? Do they experience the stages of grief proposed by Kubler-Ross (1969)? If so, in what ways do they experience these stages differently than those bereaved by death? If not, do they experience a different progression of stages of grief? Time frame of the grief of individuals who have experienced a relationship break up should also be studied further. How long do grief reactions tend to last? What factors influence the length of grief – age of the participants, length of the relationship, social support? Multiple research questions pertaining to the nature and course of grief after a relationship break up can be generated.

Recommendations for clinical practice can be also drawn from the results of this study. Gathering information about the self-construal type of clients dealing with relationship issues may shed light on their relationship orientation, coping resources (e.g. social support), and sources of self-esteem. In addition, the presence of grief responses in college students whose relationships have broken up indicates that clinicians should treat their clients within the context of grief and bereavement. For example, normalization of emotional and cognitive responses after a break up may be done by educating clients about the stages of grief. The result that high interpersonal dependency is related to high grief

responses also indicates that clients who have experienced a recent break up may benefit from a focus in therapy on increasing self-reliance and self-confidence, which may help their grief reactions to dissipate.

The initiation, development, maintenance, and termination of significant relationships take up much of our energy and focus and influence many of our thoughts, feelings, and behaviors. Thus, the study of all components of romantic relationships is essential to increase our understanding of ourselves, our significant others, and the people whom we encounter on a daily basis. The present study contributes to this understanding through the examination of the relationship of interdependent self-construal to grief after the break up of a romantic relationship. Through examination of the results of this study, as well as the continued study of the research questions it generates, our understanding of significant relationships can continue to grow.

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**APPENDICES**

## APPENDIX A

Relational-Interdependent Self-Construal Scale (RISC)

The following statements concern how you feel about relationships. We are interested in how you generally experience relationships, not just in what is happening in your current relationship. Respond to each statement by indicating how much you agree or disagree with it. Mark the letter on the bubble sheet that corresponds to your answer, using the following rating scale:

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
<b>Strongly disagree</b>						<b>Strongly agree</b>

1. My close relationships are an important reflection of who I am.
2. When I feel very close to someone, it often feels to me like that person is an important part of who I am.
3. I usually feel a strong sense of pride when someone close to me has an important accomplishment.
4. I think one of the most important parts of who I am can be captured by looking at my close friends and understanding who they are.
5. When I think of myself, I often think of my close friends or family also.
6. If a person insults someone close to me, I feel personally insulted as well.
7. In general, my close relationships are an important part of my self-image.
8. Overall, my close relationships have very little to do with how I feel about myself.
9. My close relationships are unimportant to my sense of what kind of person I am.
10. My sense of pride comes from knowing who I have as close friends.
11. When I establish a close friendship with someone, I usually develop a strong sense of identification with that person.

## APPENDIX B

Relationship Closeness Inventory

We are currently investigating the nature of interpersonal relationships. As a part of this study, we would like you to answer the following questions about your romantic relationship. Specifically, we would like you to choose the one person who you are currently dating and answer the following questions with regard to this particular person.

With this person in mind, please respond to the following questions:

1. Who is this person? (initials of first and last name only) \_\_\_\_\_
  - a. What is this person's age? \_\_\_\_\_ What is your age? \_\_\_\_\_
  - b. What is this person's sex? \_\_\_\_\_ What is your sex? \_\_\_\_\_
2. How long have you been dating this person? Please indicate the number of years and/or months (for example, 3 years, 8 months)  
 \_\_\_\_\_ years \_\_\_\_\_ months

We would like you to estimate the amount of time you typically spend alone with the person (referred to below as "X") during the day. We would like you to make these time estimates by breaking the day into morning, afternoon, and evening, although you should interpret each of these time periods in terms of your own typical daily schedule. (For example, if you work a night shift, "morning" may actually reflect time in the afternoon, but is nevertheless time immediately after waking.) Think back over the past week and write in the average amount of time, PER DAY, that you spent *ALONE WITH X, WITH NO ONE ELSE AROUND*, during each time period. If you did not spend any time with X in some time periods, write 0 hours 0 minutes.

3. DURING THE PAST WEEK, what is the average amount of time, per day, that you spent *alone with X* in the MORNING (e.g. between the time you wake and 12 noon)?  
 \_\_\_\_\_ hours(s) \_\_\_\_\_ minutes
4. DURING THE PAST WEEK, what is the average amount of time, per day, that you spent *alone with X* in the AFTERNOON (e.g. between 12 noon and 6 p.m.)?  
 \_\_\_\_\_ hours(s) \_\_\_\_\_ minutes
5. DURING THE PAST WEEK, what is the average amount of time, per day, that you spent *alone with X* in the EVENING (e.g. between 6 p.m. and bedtime)?  
 \_\_\_\_\_ hours(s) \_\_\_\_\_ minutes
6. Compared with the "normal" amount of time you usually spend alone with X, how typical was *the past week*? (Check one)  
 \_\_\_\_\_ typical \_\_\_\_\_ not typical

The following is a list of different activities that people may engage in over the course of one week. For each of the activities listed, please check all of those that you have engaged in *alone with X in the past week*. Check only those activities that were done *alone with X* and *not* done with X in the presence of others.

*In the past week*, I did the following activities *alone with X*: (Check all that apply)

- did laundry
- prepared a meal
- watched TV
- went to an auction/antique show
- attended a non-class lecture or presentation
- went to a restaurant
- went to a grocery store
- went for a walk/drive
- discussed things of a personal nature
- went to a museum/art show
- planned a party/social event
- attended class
- went on a trip (e.g. vacation or weekend)
- cleaned house/apartment
- went to church/religious function
- worked on homework
- engaged in sexual relations
- discussed things of a non-personal nature
- went to a clothing store
- talked on the phone
- went to a movie
- ate a meal
- participated in a sporting activity
- outdoor recreation (e.g. sailing)
- went to a play
- went to a bar
- visited family
- visited friends
- went to a department, book, hardware store, etc.
- played cards/board game
- attended a sporting event
- exercised (e.g. jogging, aerobics)
- went on an outing (e.g. picnic, beach, zoo, winter carnival)
- wilderness activity (e.g. hunting, hiking, fishing)
- went to a concert
- went dancing
- went to a party
- played music/sang

The following questions concern the amount of influence X has on your thoughts, feelings, and behavior. Using the 7-point scale below, please indicate the extent to which you agree or disagree by writing the appropriate number in the space corresponding to each item.

1	2	3	4	5	6	7
I strongly disagree						I strongly agree

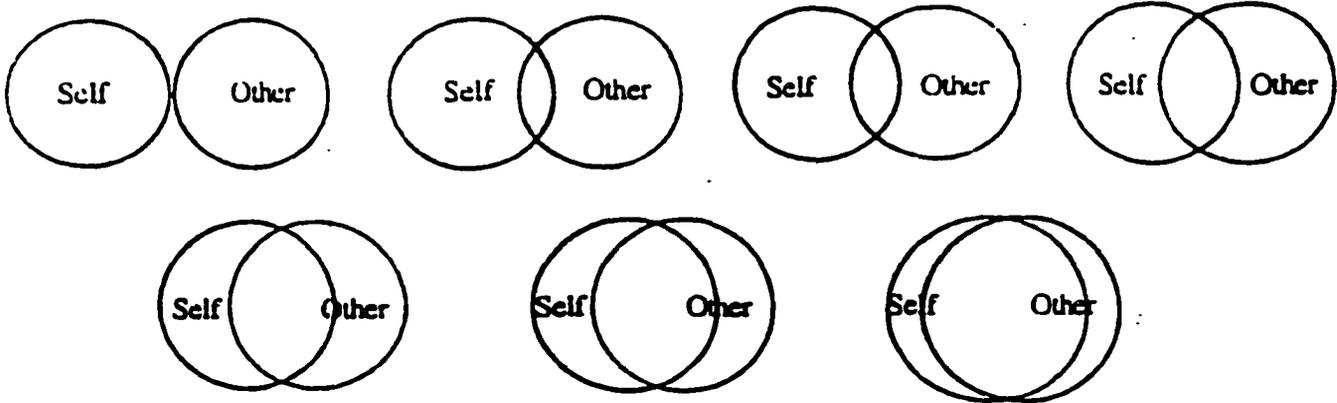
- \_\_\_\_\_ 1. X will influence my future financial security.
- \_\_\_\_\_ 2. X does *not* influence everyday things in my life.
- \_\_\_\_\_ 3. X influences important things in my life.
- \_\_\_\_\_ 4. X influences which parties and other social events I attend.
- \_\_\_\_\_ 5. X influences the extent to which I accept responsibilities in our relationship.
- \_\_\_\_\_ 6. X does *not* influence how much time I spend doing household work.
- \_\_\_\_\_ 7. X does *not* influence how I choose to spend my money.
- \_\_\_\_\_ 8. X influences the way I feel about myself.
- \_\_\_\_\_ 9. X does *not* influence my moods.
- \_\_\_\_\_ 10. X influences the basic values that I hold.
- \_\_\_\_\_ 11. X does *not* influence the opinions that I have of other important people in my life.
- \_\_\_\_\_ 12. X does *not* influence when I see, and the amount of time I spend with, my family.
- \_\_\_\_\_ 13. X influences when I see, and the amount of time I spend with, my friends.
- \_\_\_\_\_ 14. X does *not* influence which of my friends I see.
- \_\_\_\_\_ 15. X does *not* influence the type of career I have or will have.
- \_\_\_\_\_ 16. X influences or will influence how much time I devote to my career.
- \_\_\_\_\_ 17. X does *not* influence my chances of getting a good job in the future.



APPENDIX C

Inclusion of Other in the Self Scale

Please circle the picture below which best describes your relationship



## APPENDIX D

Dyadic Adjustment Scale

Most persons have disagreements in their relationships. Please mark the letter on the bubble sheet which best reflects the approximate extent of agreement or disagreement between you and your romantic partner for each item on the following list using the scale below.

Almost Always Agree	Occa- sionally Disagree	Fre- quently Disagree	Almost Always Disagree	Always Disagree
A	B	C	D	E

1. Handling family finances
2. Matters of recreation
3. Religious matters
4. Demonstrations of affection
5. Friends
6. Sex relations
7. Conventionality (correct or proper behavior)
8. Philosophy of life
9. Ways of dealing with parents or in-laws
10. Aims, goals, and things believed important
11. Amount of time spent together
12. Making major decisions
13. Household tasks
14. Leisure time interests and activities
15. Career decisions

Never	All the time	Most of the time	More often than not	Occa- sionally	Rarely
A	B	C	D	E	F

16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?
17. How often do you or your mate leave the house after a fight?
18. In general how often do you think that things between you and your partner are going well?
19. Do you confide in your mate?
20. Do you ever regret that you married? (or lived together)
21. How often do you and your partner quarrel?
22. How often do you and your mate "get on each other's nerves?"

23. Do you kiss your mate?

Almost Every Day	Every Day	Occa- sionally	Rarely	Never
A	B	C	D	E

24. Do you and your mate engage in outside interests together?

All of them	Most of them	Some of them	Very few of them	None of them
A	B	C	D	E

How often would you say the following events occur between you and your mate?

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
25. Have a stimulating exchange ideas	A	B	C	D	E	F of
26. Laugh together						
27. Calmly discuss something						
28. Work together on a project						

These are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks. Mark A for yes, B for no.

29. Being too tired for sex  
30. Not showing love

31. The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy," represents the degree of happiness of most relationships. Please circle the dot which best describes the degree of happiness, all things considered, of your relationship.

A	B	C	D	E	F	G
Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect

32. Which of the following statements best describes how you feel about the future of your relationship?

- A I want desperately for my relationship to succeed, and *would go to almost any length* to see that it does.
- B I want very much for my relationship to succeed, and *will do all I can* to see that it does.
- C I want very much for my relationship to succeed, and *will do my fair share* to see that it does.
- D It would be nice if my relationship succeeded, but *I can't do much more than I am doing* now to help it succeed.
- E It would be nice if it succeeded, but I *refuse to do more than I am doing* now to keep the relationship going.
- F My relationship can never succeed, and *there is no more that I can do* to keep the relationship going.

## APPENDIX E

Satisfaction Index

For each area listed below, please indicate how satisfied you are with your current romantic partner. Respond to each statement by indicating how much you are satisfied or unsatisfied with your partner in that area. Mark the letter on the bubble sheet that corresponds to your answer, using the following rating scale:

Very Unsatisfied		Neutral/Mixed		Very Satisfied		
A	B	C	D	E	F	G

1. Financial resources
2. Physical attractiveness
3. Ability to provide emotional support
4. Reliability/trustworthiness
5. Similarity of attitudes and values
6. Ability to be kind and understanding
7. Similarity of activity interests
8. Stability and pleasantness of personality
9. Social status
10. Ability to be close and intimate
11. Sexual attractiveness

## APPENDIX F

Social Provisions Scale (Source-Specific)

In answering the next set of questions, please think about your current relationship with your romantic partner. Please indicate the extent to which each statement describes your current relationship with your romantic partner. For each statement, please decide whether you: strongly disagree, disagree, agree, or strongly agree.

Strongly Disagree  
A

Disagree  
B

Agree  
C

Strongly Agree  
D

1. I can depend on my partner to help me, if I really need it.
2. I feel that I could not turn to my partner for guidance in times of stress.
3. My partner enjoys the same social activities that I do.
4. I feel personally responsible for the well-being of my partner.
5. I feel my partner does not respect my skills and abilities.
6. If something went wrong, I feel that my partner would not come to my assistance.
7. My relationship with my partner provides me with a sense of emotional security and well-being.
8. I feel my competence and skill are recognized by my partner.
9. I feel my partner does not share my interests and concerns.
10. I feel my partner does not really rely on me for his or her well-being.
11. I could turn to my partner for advice, if I was having problems.
12. I feel I lack emotional closeness with my partner.

## APPENDIX G

Self-Disclosure Scale

The following statements concern how you communicate to your romantic partner. Respond to each statement by indicating how much you agree or disagree with it. Mark the bubble sheet, using the following rating scale:

Disagree strongly		Neutral/Mixed			Agree Strongly	
A	B	C	D	E	F	G

1. I do not often talk about myself.
2. I intimately disclose who I really am, openly and fully in my conversation.
3. My statements of my feelings are usually brief.
4. Once I get started, my self-disclosures last a long time.
5. I usually talk about myself for fairly long periods at a time.
6. I typically reveal information about myself without intending to.
7. My conversation lasts the least time when I am discussing myself.
8. I often disclose intimate, personal things about myself without hesitation.
9. I often talk about myself.
10. I feel that I sometimes do not control my self-disclosure of personal or intimate things I tell about myself.
11. I often discuss my feelings about myself.
12. Once I get started, I intimately and fully reveal myself in my self-disclosures.
13. Only infrequently do I express my personal beliefs and opinions.

## APPENDIX H

Emotional Self-Disclosure Scale

The following statements concern topics you might discuss with your romantic partner. Please indicate how willing you would be to discuss the following topics *with your romantic partner*. Respond to each statement by indicating how willing you would be to discuss this topic. Fill in the bubble sheet using the following rating scale:

Not at all willing to  
discuss this topic

A

B

C

D

Totally willing to  
discuss this topic

E

1. Times when you felt depressed.
2. Times when you felt happy.
3. Times when you felt jealous.
4. Times when you felt anxious.
5. Times when you felt angry.
6. Times when you felt calm.
7. Times when you felt apathetic.
8. Times when you felt afraid.
9. Times when you felt discouraged.
10. Times when you felt cheerful.
11. Times when you felt infuriated.
12. Times when you felt quiet.
13. Times when you felt indifferent.
14. Times when you felt envious.
15. Times when you felt worried.
16. Times when you felt irritated.
17. Times when you felt frightened.
18. Times when you felt sad.
19. Times when you felt uneasy.
20. Times when you felt scared.
21. Times when you felt pleased.
22. Times when you felt resentful.
23. Times when you felt relaxed.
24. Times when you felt detached.

## APPENDIX I

Interpersonal Dependency Scale

Respond to each statement below by indicating how much you think it is characteristic of you. Fill in the bubble sheet using the following rating scale:

Very characteristic of me A	Quite characteristic of me B	Somewhat characteristic of me C	Not characteristic of me D
--------------------------------------	---------------------------------------	--	-------------------------------------

1. I prefer to be by myself.
2. When I have a decision to make, I always ask for advice.
3. I do my best work when I know it will be appreciated.
4. I can't stand being fussed over when I am sick.
5. I would rather be a follower than a leader.
6. I believe people could do a lot more for me if they wanted to.
7. As a child, pleasing my parents was very important to me.
8. I don't need other people to make me feel good.
9. Disapproval by someone I care about is very painful to me.
10. I feel confident of my ability to deal with most of the personal problems I am likely to meet in life.
11. I'm the only person I want to please.
12. The idea of losing a close friend is terrifying to me.
13. I am quick to agree with the opinions expressed by others.
14. I rely only on myself.
15. I would be completely lost if I didn't have someone special.
16. I get upset when someone discovers a mistake I've made.
17. It is hard for me to ask someone for a favor.
18. I hate it when people offer me sympathy.
19. I easily get discouraged when I don't get what I need from others.
20. In an argument, I give in easily.
21. I don't need much from people.
22. I just have one person who is very special to me.
23. When I go to a party, I expect that the other people will like me.
24. When I am sick, I prefer that my friends leave me alone.
25. I'm never happier than when people say I've done a good job.
26. It is hard for me to make up my mind about a TV show or movie until I know what other people think.
27. I am willing to disregard other people's feelings in order to accomplish something that's important to me.
28. I need to have one person who puts me above all others.
29. In social situations I tend to be very self-conscious.

30. I don't need anyone.
31. I have a lot of trouble making decisions by myself.
32. I tend to imagine the worst if a loved one doesn't arrive when expected.
33. Even when things go wrong I can get along without asking for help from my friends.
34. I tend to expect too much from others.
35. I don't like to buy clothes by myself.
36. I tend to be a loner.
37. When I meet new people, I'm afraid that I won't do the right thing.
38. Even if most people turned against me, I could still go on if someone I love stood by me.
39. I would rather stay free of involvements with others than to risk disappointments.
40. What people think of me doesn't affect how I feel.
41. I think that most people don't realize how easily they can hurt me.
42. I am very confident about my own judgment.
43. I have always had a terrible fear that I will lose the love and support of people I desperately need.
44. I don't have what it takes to be a good leader.
45. I would feel helpless if deserted by someone I love.
46. What other people say doesn't bother me.

## APPENDIX J

Impact of Event Scale

Below is a list of comments made by people after the break-up of a romantic relationship. Please choose the letter that indicates how frequently these comments were true for you DURING THE LAST SEVEN DAYS. If they did not occur during that time, please choose "Not at All." For each of the questions below, please circle the letter that best describes your experience, using the following scale:

A Not at All	B Rarely	C Sometimes	D Often
Frequency			
<hr/>			
1. I thought about him/her when I didn't mean to.	A	B	C D
2. I avoided letting myself get upset when I thought about him/her or was reminded of him/her.	A	B	C D
3. I tried to remove him/her from memory.	A	B	C D
4. I had trouble falling asleep or staying asleep because of pictures or thoughts about him/her that came into my mind.	A	B	C D
5. I had waves of strong feelings about him/her.	A	B	C D
6. I had dreams about him/her.	A	B	C D
7. I stayed away from reminders of him/her.	A	B	C D
8. I felt as if the break-up hadn't happened or as if it wasn't real.	A	B	C D
9. I tried not to talk about him/her.	A	B	C D
10. Pictures about him/her popped into my mind.	A	B	C D
11. Other things made me think about him/her.	A	B	C D
12. I was aware that I still had a lot of feelings about him/her, but I didn't deal with them.	A	B	C D
13. I tried not to think about him/her.	A	B	C D
14. Any reminder brought back feelings about him/her.	A	B	C D
15. My feelings about him/her were kind of numb.	A	B	C D

## APPENDIX K

Modified Marital Alternatives Scale

These days it seems like a lot of relationships are breaking up. Of course this isn't likely, but just suppose that your romantic partner were to leave you. How likely do you imagine each of the following would be? Decide whether you think each item would be impossible, possible, probable, or certain. For each of the questions below, please circle the letter that best describes your experience, using the following scale:

A Impossible                      B Possible, but Unlikely                      C Probable                      D Certain

	Likelihood			
HOW LIKELY IS IT THAT:	A	B	C	D
1. You could get another romantic partner better than your current one?	A	B	C	D
2. You could get another romantic partner as good as your current one?	A	B	C	D
3. You would be quite satisfied without a romantic partner?	A	B	C	D
4. You would be sad, but get over it quickly?	A	B	C	D
5. Your prospects for a happy future would be bleak?	A	B	C	D
6. There are many other romantic partners you could be happy with?	A	B	C	D
7. Your life would be ruined?	A	B	C	D

## APPENDIX L

Center for Epidemiological Studies – Depression Scale

Following is a list of the ways you might have felt or behaved in the past week. For each of the statements below, please circle that letter that corresponds to how often you have felt this during the past week, using the following scale:

A Rarely      B Some of the Time      C Occasionally      D Most or All of the Time

1. I was bothered by things that don't usually bother me.	A	B	C	D
2. I did not feel like eating. My appetite was poor.	A	B	C	D
3. I felt that I could not shake off the blues even with help from my family and friends.	A	B	C	D
4. I felt that I was just as good as other people.	A	B	C	D
5. I had trouble keeping my mind on what I was doing.	A	B	C	D
6. I felt depressed.	A	B	C	D
7. I felt that everything I did was an effort.	A	B	C	D
8. I felt hopeful about the future.	A	B	C	D
9. I thought my life had been a failure.	A	B	C	D
10. I felt fearful.	A	B	C	D
11. My sleep was restless.	A	B	C	D
12. I was happy.	A	B	C	D
13. It seemed that I talked less than usual.	A	B	C	D
14. I felt lonely.	A	B	C	D
15. People were unfriendly.	A	B	C	D
16. I enjoyed life.	A	B	C	D
17. I had crying spells.	A	B	C	D
18. I felt sad.	A	B	C	D
19. I felt that people disliked me.	A	B	C	D
20. I could not get going.	A	B	C	D

## APPENDIX M

Core Bereavement Items

The following statements represent thoughts and feelings commonly experienced by people who have experienced the break-up of a relationship. Listen to each statement and then determine frequently it occurs **RIGHT NOW** and how frequently it occurred **RIGHT AFTER THE BREAK-UP OF YOUR ROMANTIC RELATIONSHIP**, using the following scale: (him/her refers to your former romantic partner):

A = A Lot of the Time  
 B = Quite a Bit of the Time  
 C = A Little Bit of the Time  
 D = Never

14. I experience images of the events surrounding the break-up.  
 RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_
15. Thoughts of him/her come into my mind whether I want them to or not.  
 RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_
16. Thoughts of him/her make me feel distressed.  
 RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_
17. I think about him/her.  
 RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_
18. Imagining him/her makes me feel distressed.  
 RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_
19. I find myself preoccupied with images or memories of him/her.  
 RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_
20. I find myself thinking of getting back together with him/her.  
 RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_
21. I find myself missing him/her.  
 RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_
22. I am reminded of him/her by familiar objects (photos, possessions, rooms, etc.).  
 RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_

23. I find myself pining or yearning for him/her.

RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_

24. I find myself looking for him/her in familiar places.

RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_

25. I feel distress or pain if I am confronted with the reality that the relationship is over.

RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_

26. Reminders of him/her such as as photos, situations, music, places, etc. cause me to feel longing for him/her.

RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_

27. Reminders of him/her such as as photos, situations, music, places, etc. cause me to feel loneliness.

RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_

28. Reminders of him/her such as as photos, situations, music, places, etc. cause me to cry about him/her.

RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_

29. Reminders of him/her such as as photos, situations, music, places, etc. cause me to feel sadness.

RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_

30. Reminders of him/her such as as photos, situations, music, places, etc. cause me to feel loss of enjoyment.

RIGHT NOW: \_\_\_\_\_ RIGHT AFTER BREAK-UP: \_\_\_\_\_

## APPENDIX N

Intercorrelations among Time 1 (RISC) and Time 3 Variables

Variables	Time 1		Time 3			
	RISC N = 202	SI3 n = 87 (remained together)	IES	CESD	CBI3 n = 21 (broke up)	CBIRR
Time 1						
RISC	---					
Time 3						
SI3	.251*	---				
IES	-.408	---	---			
CESD	-.322	---	.574**	---		
CBI3	-.345	---	.684**	.721**	---	
CBIRR	.106	---	.192	.188	.540*	---

**Note.** SI3 is the Time 3 Satisfaction Index, IES is the Impact of Event Scale, CESD is the Center for Epidemiological Studies – Depression Scale, CBI3 is Core Bereavement Items at Time 3, and CBIRR is a Core Bereavement Items Retrospective Report.

\*  $p < .05$ . \*\*  $p < .01$ .

APPENDIX O

Intercorrelations among RISC (Time 1) and Time 2 Variables

Variables	Time 1		Time 2									
	RISC N = 202	DAS	MAS	SPSpart	SPSfr	SPSprnt	EDISC	SDS	SI2	RCI	IOS	IDEP
<b>Time 1</b>												
RISC	---											
<b>Time 2</b>												
DAS	.211**	---										
MAS	-.086	-.403**	---									

**Note.** RISC is the Relational-Interdependent Self-Construal Scale, DAS is the Dyadic Adjustment Scale, MAS is the Marriage Alternatives Scale, SPSpart is the Social Provisions Scale – Partner, SPSfr is the Social Provisions Scale – Friend, SPSprnt is the Social Provisions Scale – Parent, EDISC is the Emotional Self-Disclosure Scale, SDS is the Self-Disclosure Scale, SI2 is the Satisfaction Index at Time 2, RCI is the Relationship Closeness Inventory, IOS is the Inclusion of Other in Self Scale, and IDEP is Interpersonal Dependency.

\*  $p < .05$ . \*\*  $p < .01$ .

Variables	Time 1	Time 2										
	RISC N = 202	DAS	MAS	SPSpart	SPSfr	SPSprnt	EDISC	SDS	SI2	RCI	IOS	IDEP
Time 2												
SPSpart	.236**	.581**	-.410**	---								
SPSfr	.178	.193**	.140*	.310**	---							
SPSprnt	.147*	.035	.053	.235**	.199**	---						
EDISC	.130	.493**	-.264**	.507**	.250**	.107	---					
SDS	.094	.234**	-.095	.299**	.002	.085	.409**	---				
SI2	.166*	.496**	-.277**	.437**	.147*	.111	.349**	.179*	---			
RCI	.146*	.096	-.251**	.035	-.196**	.008	.009	.094	.088	---		

Variables	Time 1	Time 2										
	RISC N = 202	DAS	MAS	SPSpart	SPSfr	SPSprnt N = 202	EDISC	SDS	SI2	RCI	IOS	IDEP
Time 2												
IOS	.078	.370**	-.473**	.383**	-.096	-.040	.369**	.184**	.199**	.315**	---	
IDEP	-.009	-.273**	-.246**	-.119	-.217**	-.157*	-.227**	-.024	-.158*	-.039	-.068	---