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Female Friendships: The Impact of Traumatic Experiences on Personal Beliefs and Relationship Functioning

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Abstract

Differences in quality of close female friendships between women with and without trauma history were explored. Self-report measures were used to examine trauma history and cognitive schemas of 149 college women. Conflict resolution, intimacy, and relationship satisfaction in close female friendships were explored, as well as social support, perceived social support, intimacy goals, and perceived intimacy goals. Women who did not report trauma history reported higher use of obliging and compromising conflict resolution style in their close friendships than those who reported trauma history. Experiencing a traumatic event within the last year was significantly correlated with lower frequency of communication with a best friend. This research sheds light on the reality of close female friendships and the potential effects that trauma can have on the functioning and success of such relationships.

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Trauma affects the interpersonal functioning of individuals on many different levels (Harris & Valentiner, 2002). Specifically, schemas about the self and the world are altered as a result of traumatic experiences (Foa, Ehlers, Clark, Tolin, & Orsillo, 1999; Janoff-Bulman, 1989; Janoff-Bulman & Frieze, 1983; McCann & Pearlman, 1990). This has been found to affect how individuals relate to each other in their close relationships (Owens & Chard, 2001) in many ways, such as decreasing the level of intimacy (Fehr, 2004). A decrease in intimacy has important implications for the overall amount of social support received in these relationships (Sanderson, Rahm & Beigbeder, 2005). These effects of trauma are particularly salient for college-aged women population whose close female friendships are vital sources of social support and intimacy (Koh, Mendelson, & Rhee, 2003; Carbery & Buhrmester, 1998), which help to maintain psychological well-being (Fry & Barker, 2002). For this reason, we found it important to explore in this study, the relationships between reports of trauma history and the functioning of these college-aged female friendships.

Friendship offers a rich context in which to view the effects of trauma. Creasey (1999) found that best friend relationships are important to examine along with romantic partnerships because best friends play an important role in the life of older adolescents. Female friendship, rich in intimacy and highly

significant during early adulthood, provides a context in which patterns of relating and relationship satisfaction can be observed (Sanderson, Rahm, & Beigbeder, 2005). Women's friendships at college age are intimate in part because same-sex friendships around this time are especially relied upon for social support and emotional need fulfillment (Koh, Mendelson, & Rhee, 2003) as compared to the marital and parenthood phases of a woman's life (Carbery & Buhrmester, 1998). In this study we will examine satisfaction, conflict style, and intimacy in the close female friendships of women with and without trauma histories.

Cognitive Schemas

After a traumatic experience, personal schemas are changed (Owens & Chard, 2001; Cason, Resick, & Weaver, 2001; Foa et al., 1999) to accommodate the realization that horrific events occur in the world. Janoff-Bulman and Frieze (1983) and Janoff-Bulman (1989) detailed three sets of beliefs that are affected by trauma: perceived benevolence of the world, meaningfulness of the world, and worthiness of the self. Similarly, McCann and colleagues (1988) specified five principal areas of schematic changes resulting from sexual abuse: safety, trust, power, esteem, and intimacy as they refer to oneself and interpersonal relatedness.

Various types of trauma affect different cognitive schemas. Specifically, some traumas mainly change beliefs about the self while others change one's beliefs about the world. Foa, Ehlers, Clark, Tolin, & Orsillo (1999) explored three sets of schemas that are affected by trauma: negative cognitions about self (general negative view of self), negative cognitions about the world, and self-

blame. Owens & Chard (2001) found that female survivors of childhood sexual abuse had altered beliefs regarding self-attributions, whereas rape survivors had altered beliefs regarding both self-attributions and beliefs about the world. Foa and colleagues (1999) found that accident survivors viewed their world more positively than victims of assault. Assault was classified as interpersonal trauma as opposed to accidents. Therefore, results indicated that the interpersonal nature of trauma affects how one perceives the world, where survivors of assault view their world more negatively than individuals who have been in accidents. The role that the nature of trauma plays in one's perception of the world may have negative implications for the psychological well-being (e.g. greater depression) of those who have been involved in interpersonal traumas versus those who have undergone accidents or natural disasters.

Harris and Valentiner (2002) found that disruptions in perceived benevolence of the world, meaningfulness of the world, and worthiness of the self are related to fear of intimacy in relationships and play an important role in the interpersonal functioning of individuals. They hypothesized that the belief that the world and people are unsafe and the belief that the self is unworthy would lead individuals to avoid intimate relationships (Harris & Valentiner, 2002). Results indicated that the view of one's self and the world, as well as depression predicted fear of intimacy in relationships. Similarly, McEwan, de Man, and Simpson-Housley (2002) found that survivors of rape had greater fear of intimacy than women who had not experienced sexual assault. Davis, Petretic-Jackson,

and Ting's (2001) research indicates that women who had experienced multiple abuse (physical and sexual) reported greater fear of intimacy than women who had undergone a single type of abuse or no abuse in childhood. However, women who had reported a single type of abuse did not differ significantly from women who had no abuse history on fear of intimacy, suggesting that it is the experience of multiple types of abuse that is significant in predicting avoidance of intimate relationships (Davis et. al, 2001). As a result, trauma can create dysfunctional interaction patterns that may compromise the generally high-levels of intimacy found in female friendships (Fehr, 2004).

Trauma can disrupt patterns of relating that foster intimacy and relationship satisfaction by altering a cognitive schemas and affecting an individuals psychological well-being (e.g. greater depression) (Harris & Valentiner, 2002). McCann and colleagues (1988) noted a variety of psychological responses as a result of cognitive distortions involving one's self and the world. These include anxiety, social withdrawal, and fear of betrayal, which could greatly hinder social intimacy in the life of the trauma survivor. The Assumptive World Scales (AWS) dimensions correlated with depression and fearful attitudes toward relationships, thus pointing toward the role trauma plays in affecting post-traumatic emotions and interpersonal functioning (Janoff-Bulman, 1989; Janoff-Bulman & Frieze, 1983).

In Wenninger and Ehlers' (1998) study, rigid cognitive schemas were related to posttraumatic symptoms in survivors of childhood sexual abuse. In

addition, maladaptive beliefs about safety, trust, esteem, and intimacy were associated with higher posttraumatic symptom scores (Wenninger & Ehlers, 1998). Alterations in cognitive schemas and subsequent posttraumatic symptoms (e.g. depression and anxiety) could affect the trauma survivor's relationships in different ways. De Francis (1969) found that three fourths of child sexual abuse victims lacked a degree of maturity normal for their age group. Although most of this immaturity was attributable to cultural factors (De Francis, 1969), immaturity associated with trauma history may influence one's ability to engage in a satisfying, intimate relationship.

Specifically, trauma can change beliefs about the self by engendering feelings of guilt and self-blame. Fehr (2004) found that speaking about personal trauma creates a sense of guilt and discomfort for the survivor. De Francis (1969) found that more than the molestation itself, disclosure of the abuse brought about a sense of guilt for 64% of victims studied. They added that victims felt guilty not only from confessing the abuse, but for having been involved in the occurrence. Feelings of guilt on the part of the victim were accompanied by feelings of anxiety and lowered self-esteem (De Francis, 1969). These outcomes of childhood sexual abuse may have an impact on a victim's ability to self-disclose and maintain close relationships. Lower inclinations to self disclose may affect the development of intimacy, since self-disclosure is integral to the development of intimacy especially in female friendships (Sanderson et al., 2005). Sanderson and colleagues (2005) found that individuals who were willing to

engage in personal self-disclosure experienced greater satisfaction in relationships. Furthermore they maintained these relationships over longer periods of time while providing and receiving greater levels of social support (Sanderson et al., 2005). Schemas relating to the self and others may interfere with the tendency to self-disclose, thus possibly decreasing intimacy and satisfaction in trauma survivors. Other than self-disclosure, trauma may also disrupt the survivor's general relationship schemas and have consequences on interpersonal functioning that would promote intimacy in these relationships.

Friendship

Previous research has suggested that women's relationships are more intimate than men's relationships (Fehr, 2004; Sanderson, Rahm, & Beigbeder, 2005). The disruption of intimacy following traumatic experiences may be particularly salient for female relationships. Fehr (2004) found that intimacy was regarded by both sexes as amount and quality of "personal self-disclosure." Women were found to self-disclose more than men and were able to identify prototypical patterns of relating more efficiently than men (Fehr, 2004). Prototypical patterns of relating are more easily recognized examples of relational schemas and conform closest to expectations about social interactions. Fehr's (2004) study focused on assessing recognition of prototypical patterns of relating that would create intimacy in relationships, such as self-disclosure and emotional support. Women were able recognize these patterns of relating more quickly than men and rated them as more likely to ensure intimacy than men. In addition,

women also rated violations of prototypical patterns of relating as being more damaging to their same-sex friendships than did men, suggesting that such behaviors that lie at the core of intimacy are more valued in women's same-sex friendships (Fehr, 2004; Sanderson, Rahm, & Beigbeder, 2005).

An important aspect of the development of intimacy in close relationships involves the social support given by each individual. Social support is a fundamental aspect of relationships for university-aged women, especially since close female friendships play a crucial role in fulfilling socio-emotional needs during the college years (Carbery & Buhrmester, 1998). Sanderson, Rahm and Beigbeder (2005) found that college-age individuals who reported higher levels of intimacy goals in their same-sex friendships sought higher levels of social support and self-disclosure and thus, experienced greater satisfaction in these relationships.

Daley and Hammen (2002) found that dysphoric women received greater levels of emotional support from friends but did not perceive this increased emotional support. These dysphoric women also reported low satisfaction with their relationships, in general, despite friends' perceptions of giving high levels of support. Harris and Valentiner (2002) found that world assumptions were related to depression in survivors of sexual assault. They concluded that beliefs that the self is unfortunate and that people are malicious can contribute to feelings of powerlessness and depression after sexual assault. Therefore, it is questionable whether an individual suffering from depression, shame, or guilt as a result of

trauma would recognize the social support provided in her close friendships, and this might decrease the potential benefits of such support.

Social support is a vital characteristic of interpersonal relating, especially for trauma survivors. Fromuth (1983) found that parental support compared to sexual abuse history was more instrumental in predicting overall psychological adjustment. This finding suggests that social support is one of the most important factors that contribute to better psychological adjustment after traumatic events. Fry and Barker (2002) observed that satisfaction derived from social networks and larger network size could predict higher self-esteem, higher emotional health and lower levels of loneliness. They found that loneliness correlated positively with depression, suicide and loss of intimate relationships, but social supports could lessen the magnitude of self-stigmatization and self-blame in female survivors of violence and abuse from male aggressors (Fry & Barker, 2002). When female survivors of abuse (50% survivors of domestic violence; 50% survivors of violence instigated by male aggressors outside the home) perceived high levels of support and intimacy in their close friendships, they also scored high on measures of psychological health and adjustment (Fry & Barker, 2002). Similarly, Bal, Crombez, Oost, and Debourdeaudhuij (2003) found that adolescents with trauma histories not involving sexual abuse (compared to sexually abused adolescents) seemed to benefit especially from the perceived availability of social support.

Golding, Wilsnack, and Cooper (2002) found that survivors of sexual assault were less likely to report weekly contact with friends and reported lower levels of emotional support from friends. Lower emotional support was found to be related to the perpetrator of the abuse. If the individual was assaulted by a spouse, they would experience lower emotional support from family and friends. However if they were assaulted by a stranger, they were report higher emotional support. Unwanted sexual contact other than intercourse was associated with higher levels of support as well. This suggests that the nature of a traumatic event affects interpersonal functioning and the amount of social support received or how social support from family and friends is perceived. However, Golding and colleagues (2002) found overall that sexual assault history was related to low levels of social support. These findings are consistent with research conducted by Leitenberg, Gibson, and Novy (2004) who found that women with increased exposure to abuse in childhood more frequently used the disengagement strategy of social withdrawal. Similarly, adolescents who reported sexual abuse also used less support-seeking strategies than adolescents who reported a different type of stressful event and adolescents who did not report a stressful event (Bal et. al, 2003). Therefore, one could conclude that effects of trauma history can have a profound impact on the ability to engage in intimate relationships and receive social support from others.

In addition to intimacy and social support, conflict resolution plays an integral role in close relationship functioning (Bippus & Rollin, 2003; Koh et al.,

2003; Sanderson et al., 2005). Rahim (1983) detailed five categories of conflict management styles in relationships: integrating (high concern for self and others), obliging (low concern for self, high concern for others), dominating (high concern for self, low concern for others), avoiding (low concern for self and others), and compromising (medium concern for self and others). Integrating and compromising conflict management styles were shown to produce more friendship satisfaction and intimacy (Bippus & Rollin, 2003). According to Koh, Mendelson, and Rhee (2003), positive conflict management is when there is an equal level of concern for self and others. They found that the more positive feelings friends had for one another, the more positive, integrating, and compromising their conflict resolutions were (Koh et al., 2003). Sanderson, Rahm & Beigbeder (2005) found that individuals with a strong focus on intimacy goals in their friendships experienced higher levels of positive conflict resolution strategies (i.e. open communication and voice), less destructive conflict resolution strategies (i.e. selfish responses, reciprocal blame, criticism, exit and neglect), and thus responded more constructively to dissatisfaction in the relationship. Conflict resolution styles are not only affected by reciprocal positive feelings in a relationship, but also by the amount and exposure to conflict.

Martin (1990) pointed out that early and repeated exposure to poorly resolved conflict could exacerbate negative conflict management skills. High conflict-ridden homes may affect how an individual conceptualizes interpersonal relationships where the individual from an abusive household may adopt

maladaptive conflict resolution strategies, such as avoiding or dominating (Rahim, 1983). Consistent with this idea, Leitenberg and colleagues (2004) found that the maladaptive disengagement coping strategy of problem avoidance was a function of the presence and extent of abuse history.

The present investigation examined the intimacy and social support characteristic of close female friendships. Close friendships, according to Koh et al. (2003), have characteristics that foster more relationship satisfaction than other, less intimate types of friendship (e.g. casual friendships, peer relationships). In addition, we explored how women with trauma histories function in close female friendships compared to women who do not report traumatic events. We examined intimacy, levels of social support, conflict resolution, and relationship satisfaction in these relationships.

Comparing women who report trauma histories with those who do not report such experiences, we expect significant differences on the specific measures relating to relationship satisfaction, conflict resolution style, social support, perceived social support, friendship goals, perceived friendship goals, intimacy, and cognitions (without differences on specific subscales). Women without reported trauma histories will report higher relationship satisfaction, more adaptive conflict resolution styles, greater social support, more perceived social support, more friendship goals, more perceived friendship goals, greater intimacy and less negative cognitive schemas than women who do report trauma histories. We hypothesize that trauma history will be positively correlated with conflict

resolution styles. We expect there to be a significant positive relationship between trauma history and relationship satisfaction where women who do not report trauma history, will be highly satisfied with their relationships. It is hypothesized that trauma history will be positively correlated with intimacy, as well as intimacy goals and perceived intimacy goals in friendships. We expect posttraumatic cognitions will predict relationship satisfaction and intimacy. Age of trauma, participation in therapy, and posttraumatic cognitions in combination with other variables, will be explored as having a potential impact on satisfaction and conflict resolution style.

Method

Participants

One hundred and forty-nine undergraduate women from Mount Holyoke College were recruited to participate in this study. Since the study is looking specifically at the functioning of close, same-sex female friendships, the data of 19 women, who listed their best friend as male, were excluded from analyses. Of the 130 remaining data, an additional 19 were excluded because of missing trauma history data, leaving 111 participants who were included in the analyses. The average age of participants was 19.6 years, with a range of 17-22 years. Fifty-six percent of the sample was not financially independent of their family of origin, and the greatest percentage (46.9%) listed themselves as being middle class. The largest clustering (20%) listed an annual family income between $60,000-$79,000. The majority of the sample (68.5%) identified as White, 13.8% as Asian and Asian American, 4.6% as Biracial, 2.3% as Black, and 2.3% as Hispanic. About sixty-two percent of women reported being single and 70% reported a heterosexual sexual orientation.

Participants were also asked a set of friendship questions where they provided information about a close friendship, which they were asked to focus on for the remainder of the self-report questionnaire. For the duration of friendship, 30% reported knowing their closest friend from six to ten years, 25.4% participants reported friendship duration of over ten year, and 20% reported knowing their closest friend between three to five years. The amount of contact

women reported with their best friends also varied. About twenty-five percent of participants reported seeing their best friend every day or almost every day, and about.twenty-two percent of participants reported seeing their best friend one or two times every few months. The greatest percentage of participants (39.2%) reported speaking to their best friend every day or almost every day. About twenty-nine percent of it participants reported that they speak to their best friend a few times a week.

Participants were recruited from psychology courses, campus groups, and dormitories by flyers and word of mouth. We offered research credit to those participants from the Introduction to Psychology and Experimental Methods classes. Participants not receiving credit were entered into a raffle for a cash prize of fifty dollars.

Measures

Trauma History: The *Stress Questionnaire (SQ)* was used to assess past trauma where participants completed questions of the SQ on whether a trauma had occurred or not for the participant (Full measure is in Appendix). The two questions were as follows: (1) "Have you ever witnessed or had any experience where your life or someone else's was in danger, or where you or someone else was seriously hurt (or killed), or that was extraordinarily stressful for you?" and (2) "Did any of these experiences ever happen to you at any time in your life: Being in or seeing a bad accident? Being physically attacked or abused? Being in a flood or other disaster? A life threatening illness? Being in a warzone?

Being sexually assaulted or raped? Being threatened with a weapon? Seeing someone badly hurt or killed?" After these questions, there were follow-up questions (yes/no) on what time frame the trauma occurred in, which asked whether the trauma took place between (a) the ages of 0-6 yrs, (b) the ages of 7-12 years, (c) the ages of 12-17 years, (d) the ages of 18-present, and whether the event occurred (e) in the last year or (f) in the last six months. If the participant responded affirmatively to either of the two questions by checking off specific time periods during which the trauma occurred, they were considered to have trauma history. This short, screening method has been used with success and minimal or no distress from respondents in similar studies.

The *Stress Reactions Checklist* is a 17-item questionnaire, which assesses stress symptoms and emotional responses to trauma. Participants were asked to rate how often in the past month she has exhibited certain behaviors or had certain feelings. This was on a scale from 0-4 (0 = None of the time to 4 = All of the time). Participants had the option of circling two other ratings, 8 indicating "Don't know" and 9 indicating "Refuse." These latter two ratings were not coded. Items included statements such as, "My mind feels spacey, like I'm in a daze" and "I feel that no one can be trusted that everyone lets you down or uses you and hurts you sooner or later." The Trauma Coping Subscale included items such as, "I focus my attention on others in my life, avoiding my own needs and desires" and "I find myself eating large amounts of food to help me feel better." Higher scores indicated greater occurrence of these behaviors and feelings.

Beliefs: The *Post-traumatic Cognitions Inventory (PTCI)* measures beliefs about self and trauma (Foa et al., 1999) (Full measure is in Appendix). This is a 36-item questionnaire where the participant indicated how much she agreed or disagreed with the included statements, for example, "People can't be trusted," "I have to be especially careful because you never know what can happen next," and "I have no future." There are three specific subscales that were being assessed with this measure: (a) Negative Cognitions About the Self, (b) Negative Cognitions About the World, and (c) Self-Blame for the trauma. The Negative Cognitions About the Self subscale included questions such as, "I have permanently changed for the worse," and "I am a weak person." The Negative Cognitions About the World subscale included questions such as, "The world is a dangerous place," and "You can never know who will harm you." The Self-Blame subscale included questions such as, "Bad things have happened because of the way I acted," and "Bad things have happened to me because of the sort of person I am." Due to a transcription error, the coding of the 7-point Likert scale was reversed from the original published scale. In the current study, the statements were rated on scale from 1 (totally agree) to 7 (totally disagree). Means were calculated for each subscale with higher scores indicating more adaptive cognitions.

Friendship/Intimacy: *Intimacy Goals in Friendships* is a 14-item measure where the participant was asked to rate how much she wants to do something in her friendship on a scale of 1-5 (1= disagree strongly to 5= agree strongly) (Full

measure is in Appendix). For example, the participant was asked to rate the degree to which she wants to "provide and maintain mutual respect," "keep in touch," or "speak honestly" in her friendship. *Perception of Friend's Intimacy Goals* is similar in format to the 14-item questionnaire, *Intimacy Goals in Friendships*, but the participant was then asked how she believes her friend would respond to the items (Full measure is in Appendix). These items were also rated on a scale of 1-5 (1= disagree strongly to 5= agree strongly). This questionnaire was introduced with the beginning phrase, "In our friendship, I believe my friend wants to:" and the participant was asked to rate the following items, including statements such as "listen to me," "rely on me for advice," and "remain close" Higher scores indicate stronger focus on intimacy goals in friendship (Sanderson et al., 2005).

The *Social Intimacy Scale (Miller Social Intimacy Scale)* is a 17-item instrument that assessed intimacy in the context of friendship or marriage, with higher scores indicating greater amounts of social intimacy (Miller, 1982) (Full measure is in Appendix). Participants responded to each item (e.g. "How often do you keep very personal information to yourself and do not share it with her?") thinking of how it describes her current close female friend. Each item is rated by letters A-E from "Very rarely" to "Some of the time" to "Almost Always", "A" being "Very rarely" to "E" associated with "Almost Always." In the current version, questions regarding friendship comparisons were omitted and the instrument focused only on participant's closest friendship (or focal friendship).

Conflict Scale*:* The *Organizational Conflict Inventory-II (ROCI-II)* is a 35-item questionnaire that assesses positive and negative conflict management strategies (Rahim, 1983) (Full measure is in Appendix). Each of the five conflict styles, Avoiding, Integrating, Dominating, Obliging, and Compromising, is allocated 7 items each and were rated on 5-point Likert scale with higher values representing the greater use of a specific conflict style. An example of a question related to the Avoiding subscale is: "I attempt to avoid being "put on the spot" and try to keep my conflict with my friend to myself." An example of an Integrating subscale question is "I try to bring all our concerns out in the open so that the issues can be resolved in the best possible way." An example of a Dominating subscale question is "I use my authority to make a decision in my favor." An example of an Obliging subscale question is "I usually accommodate the wishes of my friend." Lastly, an example of a Compromising subscale question is, "I try to find a middle course to resolve an impasse."

Social Support: The *Multidimensional Support Scale (MDSS)* (Winefield et al., 1992) is an adapted 19-item instrument that measures social support for an individual across the spectrum of her different social relationships (Full measure is in Appendix). These included best friends, family/close friends, and peers. These relationships were rated on their frequency/availability and adequacy/satisfaction. Each item ("How often did they really listen to you when you talked about your concerns or problems?") was rated on two scales. The one corresponding to frequency/availability was from 1-4, 1 being "Never" and 4

corresponding with "Usually/Always." The second scale indicated adequacy/satisfaction and the participant had to rate whether she would have liked them to do a particular thing ("How often did they really make you feel loved") by rating 1, corresponding to "More often," 2, indicating "Less often," or 3, indicating "Just right."

The *Multidimensional Scale of Perceived Social Support (MSPSS)* (Zimet et al., 1988) is a 12-item measure that assesses a participant's level of perceived social support from family, friends, and a significant other (Full measure is in Appendix). We adapted this questionnaire to measure perceived social support from a person's best friend. Participants had to rate each item ("I can count on my friends when things go wrong") on a scale of 1-7, 1 being "Very strongly disagree" and 7 being "Very strongly agree." Higher scores indicate higher levels of perceived social support.

Relationship Satisfaction: The *Relationship Assessment Scale (RAS)* (Hendrick, 1988) is a 7-item scale that evaluates the current level of general satisfaction in a relationship (Full measure is in Appendix). Participants were asked to rate items on a scale of 1 (low satisfaction) to 5 (high satisfaction). Items ask how well needs are met, general satisfaction, how the relationship compares to most other relationships, regrets about relationship involvement, how much the relationship meets original expectations, love in the relationship, and number of problems in the relationship.

Procedures

Participants completed self-report measures as part of a larger data collection effort. Ninety-one participants were given a paper and pencil version of the questionnaire, while fifty-eight participants completed the self-report questionnaire online, using Form Site. The paper and pencil questionnaire on average took about 45 minutes to complete, whereas participants completed the online version of the questionnaire in 30 minutes on average. All information provided by the participants was anonymous and the identification number linked to the data was in no way connected to the participant's name or contact information. In addition, balancing procedures were used to ensure that there were no order effects. At the end of the questionnaire, the participant was debriefed and given a brief description of the study explaining how we were researching the impact past events have on relationships and was offered time to speak with the researcher. Participants were given resource numbers to contact professionals (crisis referral and counseling services on campus) if they experienced distress following participation. However, no participants reported distress during administration of the self-report questionnaire.

Results

Data was analyzed by conducting a series of one-way ANOVAs to examine group differences. Additional analyses included bivariate correlations, point-biserial and sequential regressions were also conducted. We expected women who did not report trauma histories to score higher on measures of relationship satisfaction, social support, perceived social support, friendship goals, perceived friendship goals, and intimacy. Women who did report trauma histories were also expected to report more adaptive conflict resolution styles in their friendships, more adaptive cognitive schemas, and less stress reactions than women who did report trauma histories. A significant positive relationship was expected between trauma history and conflict resolution style, relationship satisfaction, intimacy, intimacy goals, and perceived intimacy goals. It was also hypothesized that more positive views about self and the world would be associated with lower stress reactions scores. Based on findings of significant correlations, age of trauma and cognitions were expected to predict social support.

Administration Effects

Examination of order and administration format revealed significant group differences. The first condition participants completed had the trauma questions placed before relationship questions. Trauma questions were positioned before mental health questions (not reported in this study) in condition B. In condition C, trauma questions were placed after mental health questions, followed by the *Perception of Friend's Intimacy Goals* questionnaire. Lastly, condition D had

trauma questions positioned at the end of the self-report questionnaire after mental health questions and the *Perception of Friend's Intimacy Goals* questionnaire. A one-way ANOVA was conducted to examine group differences on study subscales of the self-report questionnaire. In addition to order effects, we wanted to assess any possible differences between the paper and pencil and online versions of the self-report questionnaire so that we could control for this as well.

Significant differences were found on the Miller Social Intimacy Scale scores between order conditions and administration types. Group differences between order conditions included the Miller Social Intimacy Scale Total Scale Score ($F(3, 126) = 3.51$, $p < .02$), as well as the Frequency ($F(3,126) = 2.76$, $p < .05$) and Intensity ($F(3, 126) = 3.83$, $p < .01$) subscales. Participants who were placed in condition C (trauma questions after mental health questions) reported less intimacy than participants in conditions A, B, or D. In condition C, relationship questions were positioned first in the self-report questionnaire, followed by mental health questions and then trauma questions. However, condition D had a similar structure (with the exception of the *Perception of Friend's Intimacy Goals* questionnaire) and in condition B, relationship questions were first as well. As a result of this, it is difficult to say that having the relationship questions first produced lower ratings of intimacy. The lack of structural difference in conditions C and D may explain why their means are so similar as compared to conditions A and B. For subsequent analyses with the

Miller Social Intimacy Scale, order condition was entered as a covariate to control for these differences. Table 1 illustrates the means for order condition.

In addition to order condition, there were significant differences found for the Miller Social Intimacy Scale between participants who took the paper and pencil self-report questionnaire and those who completed the questionnaire online. A one-way ANOVA revealed differences between groups of administration type for the Miller Social Intimacy Scale Total Scale Score ($F(1, 128) = 15.88$, $p < .001$), as well as the Intensity ($F(1, 128) = 11.39$, $p < .001$) and Frequency ($F(1, 128) = 21.34$, $p < .001$) subscales. Participants who completed the self-report questionnaire in Form Site reported lower intimacy than participants who completed the paper and pencil self-report questionnaire.

Table 1

Means for Order Condition

Source	Order Condition			
	A	B	C	D
Miller Social Intimacy Scale Total Scale Score	65.21[a] (SD = 9.58)	67.85 [a] (SD = 5.64)	59.1[b] (SD = 14.27)	60.85[a] (SD = 16.27)
MSIS Intensity Subscale	44.79[a] (SD = 6.05)	46.15 [a] (SD = 4.16)	40.77[b] (SD = 8.73)	41.12[a] (SD = 10.62)
MSIS Frequency Subscale	20.42[a] (SD = 3.99)	21.70[a] (SD = 2.23)	18.32[b] (SD = 5.98)	19.73[a] (SD = 6.01)

[a] n = 33
[b] n = 31

There were also significant administration type group differences for the Multidimensional Support Scale. The differences were found for availability of social support (Total: $F (1, 128) = 9.14, p < .01$), close friends and family: $F (1, 128) = 7.87, p < .01$), and peer: $F (1, 128) = 5.02, p < .05$). Participants who completed the self-report questionnaire in Form Site reported lower availability of social support from close family and friends than those participants who completed the paper and pencil self-report questionnaire. However, the Form Site group did report higher peer social support and total social support availability than the paper and pencil group.

Lastly, significant differences were found for the relationship satisfaction between the administration of paper and pencil self-report questionnaires and self-report questionnaires on Form Site. Results of a one-way ANOVA showed that there were significant group differences for the Relationship Assessment Scale ($F (1, 122) = 39.57, p < .001$). Participants who completed the self-report questionnaire in Form Site reported lower satisfaction in their relationships than participants who completed the paper and pencil self-report questionnaire. Table 2 illustrates the administration group mean differences.

Table 2

Means for Administration

Source	Administration Format	
	Paper and Pencil[a]	Form Site[b]
Miller Social Intimacy Scale Total Scale Score	66.74[a] (SD = 6.37)	58.34[b] (SD = 16.86)
MSIS Intensity Subscale	45.14[a] (SD = 4.55)	40.49[b] (SD = 10.80)
MSIS Frequency Subscale	21.60[a] (SD = 2.58)	17.85[b] (SD = 6.41)
MDSS Close Friends and Family Availability	21.26[a] (SD = 3.21)	23.00[b] (SD = 3.84)
MDSS Peer Availability	13.65[a] (SD = 2.57)	14.91[b] (SD = 3.83)
MDSS Total Availability	55.40[a] (SD = 6.60)	59.43[b] (SD = 8.59)
Relationship Assessment Mean Scale Score	4.28 (71) (SD = .60)	3.65[b] (SD = 3.65)

Group comparisons

Eighty participants reported trauma history, while 31 did not. One-way ANOVAs were conducted examining group mean differences for relationship satisfaction, social intimacy, intimacy goals, social support, perceived social support, conflict resolution styles, and cognitions. Inconsistent with our hypotheses, comparison of means showed no significant differences between women who reported trauma history and those who did not. Specifically, it was expected that women without trauma history would report higher rates of

[a] n = 77 for Paper and Pencil.
[b] n = 53 for Form Site.

relationship satisfaction, social intimacy, availability and adequacy of social support from best friends, availability of social support from close friends and family, perceived social support (total, family, friends and significant other), Integrating, Obliging, and Compromising conflict resolution styles, as well as friendship goals and perceived friendship goals. Table 3 illustrates the means for relationship satisfaction and intimacy between women who reported trauma history and women who did not report trauma history.

Table 3

Means of Relationship Intimacy

	Trauma History[a]	No Trauma History[b]
Relationship Assessment (RAS)		
RAS Scale Score	4.03 (75) (SD=.70)	4.17 (30) (SD=.50)
Miller Social Intimacy Scale (MSIS)		
Total	63.95[a] (SD=11.60)	65.39[b] (SD=9.78)
Frequency	20.24[a] (SD=4.81)	21.06[b] (SD=3.52)
Intimacy	43.71[a] (SD=7.31)	44.32[b] (SD=6.75)
Intimacy Goals in Friendships		
Friendship Goals	4.63[a] (SD=.39)	4.67[b] (SD=.32)
Perceived Friendship Goals	4.51[a] (SD=.48)	4.52[b] (SD=.45)

Although differences were not significant, direction of means showed that trauma survivors reported higher adequacy of social support from close friends

[a] n = 80 for Trauma History.
[b] n = 31 for No Trauma History.

and family (F (1, 105) = 1.25, p = .27), higher adequacy (F (1, 105) = 2.50, p < .12) and availability (F (1, 109) = 1.19, p = .28) of peer social support, and higher total adequacy (F (1, 107) = 1.57, p = .21) and availability (F (1, 109) = .00, p < .99) of social support. These results did not support the hypothesis that participants reporting trauma histories would experience less satisfaction in their close relationships than those who did not report trauma history. Table 4 illustrates means for social support and perceived social support.

Regarding the direction of means for conflict resolution styles, participants who reported trauma history also reported greater presence of Avoiding and Dominating conflict resolution styles in their close relationships. This was consistent with our hypothesis. However, when conducting a one-way ANOVA, no significant mean group differences were found on measures of Avoiding (F (1, 109) = .05, p = .83) and Dominating (F (1, 109) = .08, p = .78) conflict resolution styles. After conducting a one-way ANOVA, we found that there was a significant group mean difference between women reporting trauma history compared with those who did not regarding conflict resolution styles. Results indicated significant group differences for Obliging and Compromising conflict resolution styles. These findings were consistent with our hypothesis that participants not reporting trauma history would report higher levels of Compromising conflict resolution style. Participants who did not report trauma history, reported higher use of Obliging (F (1, 109) = 4.19, p<.04) and Compromising conflict management styles (F (1, 109) = 6.24, p<.01) than those

who did report trauma history. Table 5 illustrates means for conflict resolution style between women who reported trauma history and women who did not report a trauma history.

Table 4

Means of Social Support and Perceived Social Support

	Trauma History[a]	No Trauma History[b]
Multidimensional Scale of Social Support (MDSS)		
Total Adequacy	48.42 (79) (SD=9.52)	45.80 (30) (SD=10.30)
Total Availability	56.64[a] (SD=7.73)	56.61[b] (SD=7.71)
Best Friend Adequacy	17.30 (79) (SD=3.92)	17.50 (30) (SD=3.64)
Best Friend Availability	20.66[a] (SD=3.82)	21.19[b] (SD=3.40)
Close Friends and Family Adequacy	17.55 (78) (SD=3.67)	16.65 (29) (SD=3.74)
Close Friends and Family Availability	21.68[a] (SD=3.59)	21.84[b] (SD=3.56)
Peer Adequacy	13.96 (78) (SD=3.90)	12.62 (29) (3.90)
Peer Availability	14.30[a] (SD=3.30)	13.58[b] (SD=2.59)
Multidimensional Scale of Perceived Social Support (MSPSS)		
Total Perceived Social Support	5.85[a] (SD=1.04)	5.99 (30) (SD=.41)
Family Perceived Social Support	5.70[a] (SD=1.39)	5.99 (30) (SD=1.00)
Friends Perceived Social Support	5.87[a] (SD=1.17)	5.96 (30) (SD=.47)
Significant Other Perceived Social Support	5.98[a] (SD=1.44)	6.05 (30) (SD=.70)

[a] n = 80 for Trauma History.
[b] n = 31 for No Trauma History.

Table 5

Means of Conflict Resolution Style

	Trauma History[a]	No Trauma History[b]
Rahim Organizational Conflict Inventory—II (ROCI-II)		
Integrating	12.94 [a] (SD=3.57)	14.45 [b] (SD=4.54)
Avoiding	16.76 [a] (SD=5.46)	16.52 [b] (SD=5.04)
Dominating	17.78 [a] (SD=4.25)	17.52 [b] (SD=4.70)
Obliging	**12.91 [a] (SD=2.68)**	**14.29 [b] (SD=4.24)**
Compromising	**8.00 [a] (SD=2.02)**	**9.13 [b] (SD=2.42)**

Inconsistent with our hypothesis, no significant differences were found for cognitions between women who reported trauma history and women who did not report trauma history. Both groups of participants reported similar schemas regarding the self ($F(1, 109) = .37$, $p = .54$), the world ($F(1, 109) = .24$, $p = .62$), and feelings of self-blame ($F(1, 109) = 1.46$, $p = .23$). This is inconsistent with previous research, which suggests that trauma influences the way individuals perceive the world and the self and rearranges belief constructs (e.g. Foa et al., 1999; McCann et al., 1988). Table 6 illustrates the comparison of means for cognitive schemas between women who reported trauma history and women who did not report trauma history.

[a] n = 80 for Trauma History.
[b] n = 31 for No Trauma History.

Table 6

Comparison of means for cognitive schemas and stress reactions between women who reported trauma history and women who did not report trauma history

	Trauma History[a]	No Trauma History[b]
Negative Self Cognitions	5.89 [a] (SD = 1.01)	5.76 [b] (SD = 1.06)
Cognitive World View	5.01 [a] (SD = 1.37)	4.87 [b] (SD = 1.30)
Self-Blame	5.69 [a] (SD = 1.12)	5.39 [b] (SD = 1.28)
Stress Reactions Checklist	.67 [a] (SD = .47)	.61 [b] (SD = .34)
Trauma Coping Scale	.58 [a] (SD = .47)	.49 [b] (SD = .34)

In order to further investigate the possible explanations for this finding, a one-way ANOVA was conducted comparing stress reactions of persons reporting trauma history and those who did not. No significant results were found to exist between the groups for both the overall stress reactions symptomatology ($F(1, 109) = .35$, $p = .56$) and for trauma coping ($F(1, 109) = 1.02$, $p = .32$). Table 6 illustrates the comparison of means for stress reactions total scale scores and trauma coping subscale of the stress reactions scale between women who reported trauma history and those who did not. In addition, Pearsons correlations were conducted between stress reactions and cognitions. Cognitions about the world were negatively correlated with stress reactions ($r = -.615$, $p < .01$) and trauma coping ($r = -.384$, $p < .01$). That is, greater positive beliefs about the self were

[a] n = 80 for Trauma History.
[b] n = 31 for No Trauma History.

associated with less stress symptoms. Cognitions about the world were also negatively correlated with stress reactions ($r = -.594$, $p < .01$) and trauma coping ($r = -.370$, $p < .01$). When participants reported a more positive perception of the world, they also reported less stress symptoms. Lastly, self-blame (indicated by lower scores on the PTCI) was negatively correlated with stress reactions ($r = -.514$, $p < .01$) and trauma coping ($r = -.331$, $p < .01$). Participants who reported more adaptive cognitions regarding self-blame also reported lower stress symptoms. Despite the lack of group differences, these relationships between cognitive schemas and stress reactions were expected. Consistent with literature, greater positive beliefs about the self and the world are associated with fewer stress symptoms (Janoff-Bulman, 1989; McCann & Pearlman, 1990; Owens & Chard, 2001). Table 7 illustrates these correlations between stress reactions and cognitive schemas.

Table 7

Stress Reactions Correlations

	Negative Self Cognitions	Cognitive World View	Self-Blame
SRC Total Scale Score Mean	-.62**	-.59**	-.51**
SRC Trauma Coping Subscale Mean	-.38**	-.37**	-.33**

Relationships among variables

Point biserial correlations were calculated in order to examine the relationship between trauma history and the various indices of relationship functioning and cognitions. Consistent with our predictions, participants who did not report trauma history reported more compromising conflict resolution style (r_{pb} = .18, p < .05) in their close relationships, thus reporting more adaptive modes of conflict management than participants who did report trauma history. Trauma history was found to be a positive correlate of psychotherapy (r_{pb} = .21, p < .05) so that participants who did not report trauma history were likely not to report participation in psychotherapy. Contrary to our hypothesis, trauma history was not correlated with lower ratings of total intimacy (r_{pb} = .07, p = .45), frequency of social intimacy (r_{pb} = .09, p = .31), intensity of social intimacy (r_{pb} = .048, p = .59), intimacy goals (r_{pb} = -.01, p = .93) or perceived intimacy goals in friendship (r_{pb} = .00, p = .99). Also inconsistent with our expectations, trauma history was not correlated with lower ratings of relationship satisfaction (r_{pb} = .15, p = .10). In addition, trauma history, contrary to our predictions, was not correlated with cognitions (negative self cognitions: r = -.01, p =.88; cognitive world view: r = -.00, p = .99; self-blame: r = -.07, p = .43). Table 8 illustrates the correlations between trauma history and measures of psychotherapy, relationship functioning, and cognitive schemas.

Table 8

Trauma History Correlations

	Trauma History
Psychotherapy	.21*
Compromising Conflict Resolution	.18*
Total Intimacy	.07
Frequency of Intimacy	.09
Intensity of Intimacy	.05
Intimacy Goals	-.01
Perceived Intimacy Goals	.00
Relationship Satisfaction	.15
Negative Self Cognitions	-.01
Cognitive World View	-.00
Self-Blame	-.07

Point biserial correlations were calculated in order to examine the relationship between age of trauma and measures of relationship functioning and cognitions. Trauma between 7 to 12 years of age was positively correlated with Obliging conflict resolution style ($r_{pb} = .32$, $p < .05$). Not experiencing trauma during this time frame was associated with higher scores of Obliging conflict resolution in close friendships. Trauma between 12 and 17 years of age was negatively correlated with Avoiding conflict resolution style. Not experiencing trauma between the ages of 12 and 17 was significantly related to lower Avoiding conflict resolution style ($r_{pb} = -.30$, $p < .05$). Age of trauma was found to be a positive correlate of psychotherapy ($r_{pb} = .20$, $p < .05$) so that participants who did not experience trauma between 0 and 6 years were related to a lack of participation in psychotherapy. In addition, age of trauma was significantly

associated with currently being in therapy where participants who did not report trauma between the ages of 18 to present, also did not report current participation in psychotherapy (question 1: $r_{pb} = .30$, $p < .05$; question 2: $r_{pb} = .28$, $p < .05$). Age of trauma was not correlated with ratings of total intimacy, frequency of social intimacy, intensity of social intimacy, or intimacy goals (See Table 9 with correlations between age of trauma and intimacy). However, not experiencing trauma between the ages of 12-17 was associated with lower perception of friend's intimacy goals ($r_{pb} = -.29$, $p = .05$). Age of trauma was not correlated with ratings of relationship satisfaction (See Table 10 with correlations between age of trauma and relationship satisfaction). However, age of trauma was positively correlated with cognitions. Consistent with previous literature, not experiencing a trauma between the ages of 0-6 years was related to more adaptive self cognitions ($r_{pb} = .21$, $p = .05$). Not experiencing traumatic events from 18 years of age to present was significantly related to more adaptive cognitive schemas about the world ($r_{pb} = .32$, $p < .05$). Age of trauma was not significantly correlated with self-blame. Table 9, 10, and 11 illustrate the correlations between age of trauma and measures of psychotherapy, relationship functioning, and cognitive schemas.

Age of trauma was also found to be significantly correlated with measures of social support and perceived social support. Not experiencing trauma between the ages of 0 to 6 was significantly associated with higher scores of total perceived social support ($r_{pb} = .18$, $p < .05$), perceived support given by family (r_{pb}

= .20, $p < .05$), and the availability of social support from close friends and family ($r_{pb} = .41$, $p < .001$). Not experiencing a traumatic event between the ages of 12 and 17 was associated with higher perceived social support from family ($r_{pb} = .29$, $p < .05$) and adequacy of social support provided by close friends and family ($r_{pb} = .28$, $p < .05$). Not experiencing trauma in the last year was significantly correlated with higher perception of social support provided by family ($r_{pb} = .28$, $p < .05$). Not surviving trauma in the last six months was related to higher reports of total adequacy of social support ($r_{pb} = .32$, $p < .05$) and higher reports of adequacy of social support from a best friend ($r_{pb} = .35$, $p < .01$).

Cognitions were found to be significantly correlated with perception of perceived support and availability of social support from close friends and family. Higher total perception of social support and higher perception of social support provided by family was found to be associated with more adaptive cognitive schemas. In addition, higher availability of social support from close family and friends was significantly related with more adaptive cognitions. Table 12 illustrations these correlations between cognitive schemas, perception and availability of social support.

Table 9

Age of Trauma Correlations: Psychotherapy and Conflict Resolution Style

	Age of Trauma					
	0-6 years	7-12 years	12-17 years	18-present	In the last year	In the last 6 months
Psychotherapy						
Psychotherapy	.01[a]	-.06[a]	-.12[a]	.23[a]	.12[a]	.16[a]
(Ever during lifetime)	.20*[b]	-.02[b]	.04[b]	-.00[b]	.15[b]	.03[b]
Currently in therapy	-.17[a]	-.27[a]	-.03[a]	.30*[a]	.07[a]	.19[a]
	.15[b]	-.06[b]	-.19[b]	.28*[b]	.03[b]	.56[b]
Conflict Resolution						
Integrating	.01[a]	.00[a]	.12[a]	-.01[a]	-.23[a]	-.17[a]
	.12[b]	.13[b]	.08[b]	.06[b]	-.06[b]	-.20[b]
Avoiding	-.03[a]	-.02[a]	.01[a]	-.09[a]	.11[a]	-.01[a]
	.06[b]	-.24[b]	-.30*[b]	.07[b]	.23[b]	.13[b]
Dominating	.03[a]	.07[a]	.00[a]	-.03[a]	-.04[a]	-.22[a]
	-.04[b]	.01[b]	.13[b]	.01[b]	-.20[b]	-.05[b]
Obliging	-07[a]	.32*[a]	.08[a]	-.01[a]	.05[a]	.11[a]
	.15[b]	.11[b]	.17[b]	.07[b]	.14[b]	-.01[b]
Compromising	-.06[a]	.13[a]	.07[a]	-.10[a]	-.15[a]	-.08[a]
	.13[b]	-.13[b]	-.04[b]	-.08[b]	.00[b]	-.09[b]

[a] Age group for Question #1 of the Stress Questionnaire.
[b] Age group for Question #2 of the Stress Questionnaire.

Table 10

Age of Trauma Correlations: Intimacy, Relationship Satisfaction, and Cognitions

	Age of Trauma					
	0-6 years	7-12 years	12-17 years	18-present	In the last year	In the last 6 months
Intimacy						
Total	-.11[a]	-.08[a]	-.10[a]	.05[a]	-.03[a]	.10[a]
	.00[b]	-.15[b]	-.03[b]	-.21[b]	.21[b]	.06[b]
Frequency	-.04[a]	-.09[a]	-.07[a]	.06[a]	-.03[a]	.09[a]
	.05[b]	-.18[b]	-.05[b]	-.14[b]	.26[b]	.06[b]
Intensity	-.15[a]	-.07[a]	-.12[a]	.04[a]	-.03[a]	.10[a]
	-.03[b]	-.13[b]	-.01[b]	-.24[b]	.16[b]	.06[b]
	-.06[a]	.02[a]	-.25[a]	.10[a]	.21[a]	.23[a]
Intimacy Goals	.10[b]	.00[b]	.19[b]	-.10[b]	-.05[b]	.05[b]
Perceived Intimacy	-.06[a]	-.10[a]	-.29*[a]	.15[a]	.13[a]	.21[a]
Goals	.12[b]	.-.07[b]	.21[b]	-.03[b]	.12[b]	.12[b]
Relationship	.05[a]	.02[a]	-.12[a]	-.07[a]	-.10[a]	.10[a]
Satisfaction	.08[b]	.03[b]	.24[b]	-.20[b]	-.02[b]	-.08[b]
Cognitive Schemas						
	-.04[a]	.06[a]	-.10[a]	.06[a]	.03[a]	.03[a]
Negative Self Cognitions	.21*[b]	-.08[b]	.20[b]	-.08[b]	.20[b]	.23[b]
Cognitive World	.14[a]	.08[a]	-.21[a]	.04[a]	.01[a]	.02[a]
View	.14[b]	-.01[b]	.13[b]	.32*[b]	.22[b]	.11[b]
Self-Blame	-.17[a]	.11[a]	-.13[a]	-.08[a]	-.11[a]	-.21[a]
	.10[b]	-.04[b]	.23[b]	.08[b]	.00[b]	-.01[b]

Table 11

Correlations between Age of Trauma and Social Support

	Age of Trauma					
	0-6 years	7-12 years	12-17 years	18-present	In the last year	In the last 6 months
Perceived Social Support						
Total	.11 [a] .18*[b]	.02[a] .14[b]	.00[a] .15[b]	.01[a] .13[b]	-.03[a] .17[b]	-.10[a] .03[b]
Family	.17[a] .20*[b]	.15[a] .09[b]	.14[a] .29*[b]	.06[a] .25[b]	.04[a] .28*[b]	-.04[a] .05[b]
Friends	.04[a] .13[b]	-.07[a] .12[b]	-.09[a] -.01[b]	-.01[a] .02[b]	-.08[a] .10[b]	-.11[a] .02[b]
Adequacy of Social Support						
Total	.09[a] .06[b]	.05[a] -.08[b]	-.07[a] .19[b]	-.17[a] .21[b]	.06[a] .17[b]	-.05[a] .32*[b]
Best Friend	-.17[a] .10[b]	.08[a] -.12[b]	-.04[a] .05[b]	-.04[a] .23[b]	.13[a] .19[b]	.00[a] .35**[b]
Close Friends and Family	.25[a] .01[b]	.03[a] .02[b]	-.09[a] .28*[b]	-.23[a] .05[b]	-.13[a] .04[b]	-.01[a] -.07[b]
Availability of Social Support						
Close Friends and Family	.41**[a] .07[b]	.00[a] .11[b]	-.00[a] .24[b]	.04[a] .01[b]	.03[a] .06[b]	-.05[a] -.02[b]

[a] Age group for Question #1 of the Stress Questionnaire.
[b] Age group for Question #2 of the Stress Questionnaire.

Table 12

Correlations between cognitive schemas and social support

	Negative Self Cognitions	Cognitive World View	Self-Blame
Total Perceived Social Support	.36**	.38**	.37**
Family Perceived Social Support	.20*	.23**	.18*
Availability of Close Family and Friends Social Support	.18*	.23**	.20*

Impact of Age of Trauma on Adequacy and Perception of Social Support

Based on significant correlational relationships between relationship functioning variables, age of trauma, and cognitions, exploratory sequential regressions were conducted. We conducted a series of linear sequential regressions to examine the association between the age at which an individual experienced trauma and the adequacy and perception of social support in their close relationships. Prior research has suggested posttraumatic cognitions (e.g. negative feelings about the self and the world, as well as self-blame) to be influential in the perception of close relationship functioning after experiencing traumatic events (Janoff-Bulman, 1989; Janoff-Bulman & Frieze, 1983; McCann et al., 1988; McCann & Pearlman, 1990; Owens & Chard, 2001). Age of trauma has also been found to be instrumental in later relationship functioning. Previous research suggests that earlier occurrence of traumatic events is related to later consequences, such as disruptions in intimacy and social support (Herman, 1997).

The first equation examined the Age of trauma variable and negative self cognitions as predictors for feelings perceived social support provided by family. We tested to see if the independent variables, age of trauma and cognitions would predict perceived social support. Contrary to our predictions, age of trauma (0-6 years), and negative self cognitions did not predict family perceived social support (R^2 =.02, F (2, 52) = .63, p = .54). However, analyses revealed significant effects of age of trauma (0-6 years) and negative self cognitions on total perceived social support. More specifically, negative feelings about the self were found to significantly predict total perceived social support when age of trauma was included in the equation (R^2=.11, F (2, 52) = 3.08, p<.05). Even though this second model predicts total perceived social support, there is a relatively low percent of variance accounted for. Table 13 illustrates this model where age of trauma (0-6 years) and negative self cognitions predict total perceived social support.

Table 13

Summary for Sequential Regression Analysis for Variables Predicting Total Perceived Social Support

Model	Variable	*B*	*SE B*	β	R^2
Model 1	Age of Trauma (0-6 years)	.41	.37	.15	.02
Model 2	Age of Trauma (0-6 years)	.45	.35	.17	
	Negative Self Cognitions	.28	.13	.29*	.11

Discussion

Our examination of the relationship functioning in close female friendships among college-aged women yielded many interesting results. We expected to find many more differences in relationship functioning between women who reported trauma history versus those who did not. Contrary to our hypothesis, we did not find significant group differences relating to relationship satisfaction, social support and intimacy. However, women without trauma history were found to use greater adaptive conflict management strategies in their close relationships, but interestingly this did not lead to overall group differences in relationship satisfaction. These results were consistent with our expectations that women without trauma histories would report more positive conflict management in their close friendships. Consistent with expectations, trauma history was positively correlated with conflict resolution style. Contrary to hypotheses, there were no significant correlations between trauma history and relationship satisfaction or intimacy. Results revealed that age of trauma and cognitions were found to predict perceived social support.

Research shows that more adaptive conflict resolution strategies support intimacy and satisfaction in relationships (Bippus & Rollin, 2003; Koh et al., 2003; Sanderson, Rahm, & Beigbeder, 2005). Our results show that women without reported trauma histories use greater Obliging and Compromising conflict resolution styles. A Compromising conflict resolution style is considered to be adaptive since it shows high concern for self and others, whereas a maladaptive

conflict resolution style such as Avoiding, shows low concern for self and others (Rahim, 1983). Adaptive conflict resolution could ensure greater intimacy and satisfaction in the relationship, or could result from already pre-existing high levels of intimacy and satisfaction. Thus, we expected women without reported trauma history to experience both more adaptive conflict management and subsequently more intimacy and satisfaction in their close friendships. However our hypothesis that women with no reported trauma histories would experience significantly higher levels of intimacy and satisfaction in their close female friendships was not supported.

The one-way ANOVAs that were conducted did not reveal significant group differences. However, the comparisons of means indicate relationships between variables that are consistent with our initial hypotheses. The means, though not significantly different, showed directions that coincided with our hypotheses that women not reporting trauma history would experience greater relationship satisfaction, social intimacy, higher levels of perceived social support, and higher levels of more positive conflict management (e.g. Integrating and Compromising) than women who reported trauma history.

The comparison of means of conflict resolutions styles did support our hypothesis that women with reported trauma history would also have high scores on maladaptive conflict resolution styles in their relationships. Though the difference was not significant, women reporting trauma histories scored higher on maladaptive means of conflict management than women who did not report

trauma histories. More specifically, they reported more avoiding and dominating conflict resolution in their close friendships compared with women who did not report trauma histories.

Our hypothesis that the presence of traumatic experiences in the lives of these college-aged women would be negatively correlated with intimacy as well as intimacy goals and perceived intimacy goals was not supported. Our hypothesis that posttraumatic cognitions would be negatively differ between groups was not supported. Perhaps this lack of difference between the cognitions of women who reported trauma histories and those who did not, partially explains why there were also no significant differences on relationship satisfaction, conflict, social support and intimacy in their relationships. In addition, there were no significant group mean differences for stress symptomatology. This may be because this sample is particularly resilient. Resilience in this sample may result from greater access to resources and social support since participants are of high socioeconomic status and are attending an institution of higher learning. For example, women from this sample may have had more of an opportunity to participate in psychotherapy, increase self-awareness and help adjust schemas after trauma. Also, the fact that the sample attends a single-sex college may have played a role in the quality of relationships these women have and they may receive greater social support from one another compared to other women their age. This sample reported receiving high amounts of social support and research shows social support is crucial trauma recovery (Fry & Barker, 2002). Therefore,

it would be interesting to compare the results from this sample to a population from a coeducational college and a same-age population not attending college, to examine differences in relationship functioning (e.g. amount of social support received). People from a lower socioeconomic background may have less access to certain social supports or psychological resources, which could affect the functioning of their relationships.

There are other possible explanations for the lack of difference between participants with trauma history and participants without trauma history. Some traumas could potentially increase the intimacy and social support shared in friendship. This could be particularly true for trauma victims who bond over their common experience. Given the emotional toll trauma takes, the need for intimacy and social support in these relationships could be greater. The existence of trauma history may render individuals particularly vulnerable to trauma symptoms (e.g. depression) and presence of psychopathology. Therefore, in order to maintain emotional well-being, they seek out and are sensitive to intimacy in their close relationships. However, with the feelings of mistrust and self-blame that trauma incurs, I maintain my hypothesis that individuals with trauma history would be more likely to report higher relationship satisfaction compared to individuals without any reported trauma history.

Age of trauma correlations indicated a significant positive relationship between not experiencing a trauma during a certain period of time and relationship functioning. Not having trauma between late childhood and

adolescence was correlated with more Obliging conflict resolution style and less Avoiding conflict resolution style. This suggests that there may be a critical period when more complex relationship functioning schemas (e.g. how to resolve conflicts) are being constructed. However, age of trauma was not found to be significantly related to intimacy or satisfaction in close relationships.

Age of trauma was found to be significantly correlated with measures of social support and perceived social support. Not experiencing trauma in early childhood and adolescence seems to benefit an individual's ability to perceive higher amount of social support (from family and close friends) and feel that there is a high availability of this social support and that it is adequate. Not experiencing a traumatic event I the last six months was related to higher reports of total adequacy of social support and higher reports of adequacy of social support from a best friend. Overall, not experiencing trauma is related to higher perception of social support and reports of availability and adequacy of this support.

Age of trauma was positively correlated with cognitions. Consistent with previous literature, not experiencing a trauma between the ages of 0-6 years was related to more adaptive self cognitions, further supporting the idea that early trauma can be especially detrimental to developing cognitive schemas. Not experiencing traumatic events from 18 years of age to present was significantly related to more adaptive cognitive schemas about the world. It is interesting that the lack of trauma at an earlier age was correlated with more adaptive self

cognitions and a lack of trauma at a later age was correlated with more adaptive cognitive schemas about the world. Perhaps different stages of life are more critical than others in the development of different types of schemas (e.g. self vs. world). In addition, it was the lack of trauma in the earlier and most recent part of life that seemed to have the greatest effect on schemas, much like with conflict resolution style.

There may be a link as well between the age of trauma and future psychological well-being. Results showed that participants who did not experience trauma between 0 and 6 years reported a lack of participation in psychotherapy. Perhaps having a traumatic experience early in life increases the probability of participating in psychotherapy later on. In addition, age of trauma was significantly associated with currently being in therapy where participants who did not report trauma between the ages of 18 to present, also did not report current participation in psychotherapy. This is not surprising, since a more recent trauma would prompt a greater chance of participation in psychotherapy.

Exploratory sequential regressions were conducted and indicated that age of trauma (0-6 years) along with negative self cognitions predicted total perceived social support. This is interesting that there was a significant model given that there was little significant difference between women who reported trauma history and women who did not report trauma history. The age of trauma variable in the model supports the idea that early occurrence of trauma in particular can

have lasting impacts on the way relationships are perceived in the future; in this case the way social support is perceived.

The current study had many limitations, including characteristics of the sample and aspects of administration that may have compromised validity. First, this sample was demographically homogenous, comprised of predominantly Caucasian participants from the middle to upper middle class at a private institution for higher education. Consequently, the specific ethnic and socio-economic characteristics of the sample may diminish the ability of these results to be generalized to a wider population. Second, the sample had unequal sizes of participants who reported trauma history (n = 80) and of participants who did not report trauma history (n = 31). This may have significantly decreased the power of results from the group of participants who did not report trauma history. There may have been differences between the two groups that were not produced due to the small sample size of participants who did not report trauma history. Future investigations would benefit from a larger sample size with more equal group distribution.

These unequal sample sizes may indicate administration effects. The majority of participants who completed the online (Form Site) version of the questionnaire reported experiencing some kind of trauma in their past. Participants who completed the paper and pencil version of the questionnaire were more evenly distributed into the two groups of individuals who reported trauma history and those who did not. This indicates a more random sample;

however one can question whether the format of taking the self-report questionnaire online encouraged a greater sense of anonymity. In addition, participants who completed the online version of the questionnaire also reported lower intimacy, satisfaction, and availability of social support from close family and friends than those participants who completed the paper and pencil self-report questionnaire. This further supports the notion that individuals completing the Form Site questionnaire may have felt more ability to self-disclose as well as a greater feeling of anonymity.

These group differences on administration type may indicate a possible social desirability or demand characteristics effect among the two groups. It is possible that participants who filled out the paper and pencil version of the questionnaire also felt more compelled to provide a socially desirable report of their close friendship, since the dynamic of filling out a paper and pencil copy of the questionnaire may be different from doing so online. A possible greater sense of anonymity could have been associated with the online version of the questionnaire despite explicit statements and reminders given to participants that their anonymity would be protected. One could speculate that the potential greater sense of anonymity associated with completing the self-report questionnaire online was associated with less socially desirable responses from participants regarding their trauma history, close relationships, and mental health. In addition, many of the measures used in the self-report questionnaire have not

been validated on the computer; further supporting that there may have been a qualitative difference in completing particular measures online.

Along with group differences in administration type, there was an order effect where participants who were asked questions regarding their relationships after answering questions about their mental health scored significantly lower on measures of intimacy compared with participants in the other order conditions. In some way, perhaps, the questions about mental health primed the participant to perceive her close friendship differently in terms of intimacy. The questions about mental health may have changed her mood (e.g. making her feel negatively), or made her more likely to look at herself and her relationships realistically.

Another area of concern in the administration was the Stress Questionnaire used in the self-report questionnaire. For the "Age of Trauma" variable, age twelve was repeated for two of the time period options. This may have affected how people reported their age of trauma. For example, they may have ended up selecting multiple time periods if the trauma happened at age twelve. An additional aspect of the Stress Questionnaire is its broad scope of trauma. It was meant to be a simple screen to categorize participants into the dichotomous variable of having had "trauma" or having had "no trauma," but perhaps the questionnaire was too inclusive. It is a possibility that the general definitions of trauma used, augmented the number of participants who listed themselves as having experienced a traumatic event. In future investigations, it would be

beneficial to use a more specific measure of trauma history in the self-report questionnaire. With this more specific measure, one could distinguish between interpersonal trauma and traumatic events resulting from natural disasters or accidents. It would be interesting to see how the nature of trauma relates to relationship functioning, where it could be hypothesized that interpersonal trauma would be more associated with problems in relationship functioning than trauma resulting from natural disasters or accidents. In addition, it would be helpful to be able to assess the amount of trauma experienced by a participant.

Administering the self-report questionnaire to a clinical population might be useful for future investigations. It is possible that the Stress Questionnaire did not appropriately categorize the two groups or that the qualifiers of trauma were not distinct. Drawing the sample from rape crisis centers or domestic violence shelters would narrow the sample to individuals who definitely survived interpersonal trauma and may help in understanding the intensity of trauma experienced by participants.

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Appendix

Demographics Form

1. Age: _____

2. Male_____ Female_____ Other_____

The following two questions ask about income. If you are not financially dependent on your family of origin, please check here the box below and answer the questions based on your/current family's income.

Check here if you are financially independent from family of origin _____

3. What is your current annual family income (your best estimate?
   _____less than $19,999.00
   _____$20,000 - $39,999.00
   _____$40,000 - $59,999.00
   _____$60,000 - $79,000.00
   _____$80,000 - $100,000.00
   _____$100,000 - $150,000.00
   _____$151,000 - $200,000.00
   _____over $200,000.00

4. How would you describe yourself ethnically or racially?
   ___African American/Black
   ___Asian/Asian American
   ___Biracial/Multiethnic
   ___Caribbean /Caribbean American
   ___Caucasian//European American/White
   ___East Asian/East Asian American
   ___Hispanic
   ___Indian
   ___Latino/a
   ___Latin American
   ___Native American/American Indian
   ___Pacific Islander
   ___Southeast Asian/Southeast Asian American
   ___South American
   ____ _____ (please specify)

5. Which of the following would best describe your family of origin's social and economic status?
   _____poor
   _____working class
   _____middle class
   _____upper middle class
   _____wealthy

6. What is your relationship status
   ___single
   ___dating (multiple persons or casually dating one person)
   ___committed relationship
   ___domestic partnership/life partners
   ___married

7. Please describe your comfort with the English language
   ____write and read English with no difficulty
   ____write and read English well
   ____write and read English with minimal difficulty
   ____write and read English with substantial difficulty

8. How would you classify your sexual orientation?
   ____heterosexual
   ____gay/lesbian
   ____bisexual
   ____pansexual
   ____undecided/questioning
   ____other

The following questions ask about your best or closest friend. If you have several friends that you are close to please pick one to think about when answering the following question. You should refer to this person for all questions in this experiment that ask you to focus on your closest or best friend. We would like you to answer the following questions about a friend with whom you are currently not involved in a romantic or sexual relationship with.
PLEASE REFER TO THIS PERSON through out the questionnaires when asked about your BEST or CLOSEST FRIEND

9. How long have you currently known your best friend?
___ 3 months or less
___ 6 months or less
___ 9 months or less
___ 1 -2 years
___ 2-3 years
___ 3-5 years
___ 6 to 10 years
___ over 10 years

10. What is the sex of your best friend?
____Male _____Female ____Other

11. Have you ever been in a romantic relationship with your best friend?
___Yes ___No

12. How often do you see your best friend (on average)?
___Every day or almost every day
___A few times a week
___A few times a month
___One or 2 times every other month
___One or two times every few months
___About once a semester
___About once a year
___About once every couple of years
___Have not seen him/her in several years

13. How often do you speak to your best friend (on average)?
___Every day or almost every day
___A few times a week
___A few times a month
___One or 2 times every other month
___One or two times every few months
___About once a semester
___About once a year

___About once every couple of years
___Have not seen him/her in several years

14. What is the your most favorite thing to do with your best friend?
___Talk
___Watch movies/TV
___Exercise
___Eat meals
___Shop
___Crafts
___Other (please specify):

_____

The following questions ask about your experiences in psychotherapy. We refer to therapy in a professional setting with a professional therapist.

15. Have you ever been in psychotherapy?
___Yes ___No

16. If so, are you currently in therapy?
___Yes ___No

17. If so, how recently were you in therapy?
___less than 3 months ago
___less than 6 months ago
___less than 1 year ago (in the past year)
___more than 2 years ago

18. What is the longest period of time that you have been in therapy?
Specify here: _____

SQ

Please answer yes or no to the following questions

1. Have you ever witnessed or had any experience where your life or someone else's was in danger, or where you or someone else was seriously hurt (or killed)?

   YES (please continue to question a) NO (Please continue to question 2)

   a. Did this event(s) occur between the ages of 0-6?

      YES NO

   b. Did this event(s) occur between the ages of 7-12?

      YES NO

   c. Did this event(s) occur between the ages of 12-17?

      YES NO

   d. Did this event(s) occur between the ages of 18- current age?

      YES NO

   e. Did this event(s) occur in the last year?

      YES NO

   f. Did this event(s) occur in the last six months?

      YES NO

2. Have you ever experienced any of the following (see below) at any point during your life?
   Being in a bad accident?
   Being physically attacked or abused?
   Being in a flood or other disaster?
   Had a life threatening illness?
   Being in a war zone?

Being sexually assaulted or raped?
Being threatened with a weapon?
Seeing someone badly hurt or killed?

YES (if yes, please continue to a) NO

a. Did this event(s) occur between the ages of 0-6?

   YES NO

b. Did this event(s) occur between the ages of 7-12?

   YES NO

c. Did this event(s) occur between the ages of 12-17?

   YES NO

d. Did this event(s) occur between the ages of 18- current age?

   YES NO

e. Did this event(s) occur in the last year?

   YES NO

f. Did this event(s) occur in the last six months?

   YES NO

SR Checklist

How often in the past 30 DAYS have you done the following things or had the following feelings? Using this scale tell me if you feel this way none of the time, a little of the time, some of the time, most of the time, or all of the time.

		None of the time	A little of the time	Some of the time	Most of the time	All of the time	Don't know	Refuse
1	**My mind feels spacey, like I'm in a daze.**	0	1	2	3	4	8	9
2	**I feel detached from the world around me, like people and things are not real, or like it's all a dream.**	0	1	2	3	4	8	9
3	**I won't let myself eat or I make myself throw up because I am afraid of losing control of my eating and gaining weight.**	0	1	2	3	4	8	9
4	**I feel preoccupied with sex—I think too much about sex.**	0	1	2	3	4	8	9
5	**I am more sexually active than I really want to be.**	0	1	2	3	4	8	9
6	**I find myself in dangerous situations, such as driving recklessly or being in places or with people where I could get hurt badly or even killed.**	0	1	2	3	4	8	9
7	**I focus my attention on others in my life, avoiding my own needs and desires.**	0	1	2	3	4	8	9
8	**I feel as if I don't know who I am and I'm watching myself from outside, or like there are separate parts of me that take control of my life.**	0	1	2	3	4	8	9
9	**I find myself eating large amounts of food to help me feel better.**	0	1	2	3	4	8	9
10	**I get relief from feeling stressed by cutting, punching, or hurting my**	0	1	2	3	4	8	9

	body in some other way.							
11	**I find myself avoiding sex, not wanting to think about it or not wanting anyone to touch me in any way.**	0	1	2	3	4	8	9
12	**I think about dying as a way of ending the misery I feel.**	0	1	2	3	4	8	9
13	**I feel I'm really different from everyone around me--no one can really understand what I've been through.**	0	1	2	3	4	8	9
14	**I feel I'm a bad person, like I'm guilty whenever bad things happen even if they really aren't my fault.**	0	1	2	3	4	8	9
15	**I have physical pain, illnesses, or other problems with my body that doctors can't explain or help me with.**	0	1	2	3	4	8	9
16	**I feel that no one can be trusted, that everyone lets you down or uses you and hurts you sooner or later.**	0	1	2	3	4	8	9
17	**I feel that religion and the spiritual aspects of life are worthless, or that they are bad and hurt people.**	0	1	2	3	4	8	9

PTCI

We are interested in the kind of thoughts which you may have had after negative life events. Below are a number of statements what may or may not be representative of your thinking.

Please read each statement carefully and tell us how much you AGREE or DISAGREE with each statement.

People react to events in many different ways. There are no right or wrong answers to these statements.

1. Bad things have happened because of the way I acted.

Agree *Disagree*

1 2 3 4 5 6 7

2. [c]I can't trust that I will do the right thing.

Agree *Disagree*

1 2 3 4 5 6 7

3. I am a weak person.

Agree *Disagree*

1 2 3 4 5 6 7

4. I will not be able to control my anger and will do something terrible.

Agree *Disagree*

1 2 3 4 5 6 7

5. I can't deal with even the slightest upset.

Agree *Disagree*

1 2 3 4 5 6 7

6. I used to be a happy person but now I am always miserable.

---

[c] Negative self cognitions= Questions 2, 3, 4, 5, 6, 9, 12, 14, 16, 17, 20, 21, 24, 25, 26, 28, 29, 30, 33, 35, 36

Agree *Disagree*

1 2 3 4 5 6 7

7. [d]People can't be trusted.

Agree *Disagree*

1 2 3 4 5 6 7

8. I have to be on guard all the time.

Agree *Disagree*

1 2 3 4 5 6 7

9. I feel dead inside.

Agree *Disagree*

1 2 3 4 5 6 7

10. You can never know who will harm you.

Agree *Disagree*

1 2 3 4 5 6 7

11. I have to be especially careful because you never know what can happen next.

Agree *Disagree*

1 2 3 4 5 6 7

12. I am inadequate.

Agree *Disagree*

1 2 3 4 5 6 7

13. I will not be able to control my emotions, and something terrible will happen.

[d] Cognitive World View= Questions 7, 8, 10, 11, 18, 23, 27

Agree *Disagree*

1 2 3 4 5 6 7

14. If I think about the event, I will not be able to handle it.

Agree *Disagree*

1 2 3 4 5 6 7

15. [e]Bad things have happened to me because of the sort of person I am.

Agree *Disagree*

1 2 3 4 5 6 7

16. My reactions mean that I am going crazy.

Agree *Disagree*

1 2 3 4 5 6 7

17. I will never be able to feel normal emotions again.

Agree *Disagree*

1 2 3 4 5 6 7

18. The world is a dangerous place.

Agree *Disagree*

1 2 3 4 5 6 7

19. Somebody else could have stopped bad things from happening.

Agree *Disagree*

1 2 3 4 5 6 7

20. I have permanently changed for the worse.

Agree *Disagree*

[e] Self-Blame= Questions 1, 15, 19, 22, 31

1 2 3 4 5 6 7

21. I feel like an object, not like a person.

Agree *Disagree*

1 2 3 4 5 6 7

22. Somebody else would not have been in this situation.

Agree *Disagree*

1 2 3 4 5 6 7

23. I can't rely on other people.

Agree *Disagree*

1 2 3 4 5 6 7

24. I feel isolated and set apart from others.

Agree *Disagree*

1 2 3 4 5 6 7

25. I have no future.

Agree *Disagree*

1 2 3 4 5 6 7

26. I can't stop bad things from happening to me.

Agree *Disagree*

1 2 3 4 5 6 7

27. People are not what they seem.

Agree *Disagree*

1 2 3 4 5 6 7

28. My life has been destroyed by the trauma.

Agree *Disagree*

1 2 3 4 5 6 7

29. There is something wrong with me as a person.

Agree *Disagree*

1 2 3 4 5 6 7

30. My reactions to bad things show I am a lousy coper.

Agree *Disagree*

1 2 3 4 5 6 7

31. There is something about me that made bad things happen.

Agree *Disagree*

1 2 3 4 5 6 7

32. I will not be able to tolerate my thoughts about the event. And I will fall apart.

Agree *Disagree*

1 2 3 4 5 6 7

33. I feel like I don't know myself anymore.

Agree *Disagree*

1 2 3 4 5 6 7

34. You never know when something terrible will happen.

Agree Disagree

1 2 3 4 5 6 7

35. I can't rely on myself.

Agree *Disagree*

1 2 3 4 5 6 7

36. Nothing good can happen to me anymore.

Agree						*Disagree*
1	2	3	4	5	6	7

Friendship Goals

1	2	3	4	5
Disagree strongly	Disagree somewhat	Neutral/Not sure	Agree somewhat	Agree strongly

In our friendship, I want to:

1. Share my thoughts and feelings _____
2. Provide and maintain mutual respect _____
3. Have him/her listen to me _____
4. Be accepted despite my faults/quirks _____
5. Be able to trust him/her _____
6. Rely on him/her for advice _____
7. Keep in touch _____
8. Learn about his/her thoughts and feelings _____
9. Remain close _____
10. Gain emotional support _____
11. Speak honestly _____
12. Share my most intimate thoughts and feelings _____
13. Have our friendship make my life more comfortable _____
14. Spent a substantial amount of time together _____

Perceived Friendship Goals

1	2	3	4	5
Disagree strongly	Disagree somewhat	Neutral/Not sure	Agree somewhat	Agree strongly

In our friendship, I believe my friend wants to:

1. Share his/her thoughts and feelings _____
2. Provide and maintain mutual respect _____
3. Listen to me _____
4. Be accepted despite his/her faults/quirks _____
5. Be able to trust me _____
6. Rely on me for advice _____
7. Keep in touch _____
8. Learn about my thoughts and feelings _____
9. Remain close _____
10. Gain emotional support _____
11. Speak honestly _____
12. Share his/her most intimate thoughts and feelings _____
13. Have our friendship make his/her life more comfortable _____
14. Spend a substantial amount of time together _____

Miller Social Intimacy Scale

A number of phrases are listed below that describe the kind of relationships people have with others. Indicate, by circling the appropriate letters in the answer field, how you would describe your current relationship with your closest female friend. This female friend should be someone whom you consider to be your closest friend at this time.

*		Very rarely		Some of the time		Almost always
1.	When you have leisure time how often do you choose to spend it with her alone?	A	B	C	D	E
2.	How often do you keep very personal information to yourself and do not share it with her?	A	B	C	D	E
3.	How often do you show her affection?	A	B	C	D	E
4.	How often do you confide very very personal information to her?	A	B	C	D	E
5.	How often are you able to understand her feelings?	A	B	C	D	E
6.	How often do you feel close to her?	A	B	C	D	E

		Not much		A little		A great deal
7.	How much do you like to spend time alone with her?	A	B	C	D	E
8.	How much do you feel like being encouraging and supportive to her	A	B	C	D	E

* Frequency=Questions 1-6 Intensity=Questions 7-17

when she is unhappy?

9.	How close do you feel to her most of the time?	A	B	C	D	E
10.	How important is it to you to listen to her personal disclosures?	A	B	C	D	E
11.	How satisfying is your relationship with her?	A	B	C	D	E
12.	How affectionate do you feel towards her?	A	B	C	D	E
13.	How important is it to you that she understand your feelings?	A	B	C	D	E
14.	How much damage is caused by a typical disagreement in your relationship with her?	A	B	C	D	E
15.	How important is it to you that she be encouraging and supportive to you when you are unhappy?	A	B	C	D	E
16.	How important is it to you that she shows you affection?	A	B	C	D	E
17.	How important is your relationship with her in your life?	A	B	C	D	E

Multidimensional Scale of Perceived Social Support

We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement by circling the appropriate number using the following scale:

1 = Very strongly disagree
2 = Strongly disagree
3 = Mildly disagree
4 = Neutral
5 = Mildly agree
6 = Strongly agree
7 = Very strongly agree

1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There's a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

MDSS

Below are some questions about the kind of help and support you have available to you in coping with your life at present. The questions refer to three different groups of people who might have supported you IN THE LAST MONTH. For each item, please circle the alternative which shows your answer.

A. Firstly, think of your best friend. .

						Would have liked them to do this[f]		
		Never[g]	Sometimes[b]	Often[b]	Usually/Always[b]	More often	Less often	Just right
1	How often did he or she really listen to you when you talked about your concerns or problems?	1	2	3	4	1	2	3
2	How often did you feel that he or she was really trying to understand your problems?	1	2	3	4	1	2	3
3	How often did he or she try to take your mind off your problems by telling jokes or chattering about other things?	1	2	3	4	1	2	3
4	How often did he or she really make you feel loved?	1	2	3	4	1	2	3

[f] Adequacy
[g] Availability

5	How often did he or she help you in practical ways, like doing things for you or lending you money?	1	2	3	4	1	2	3
						Would you like them to do this		
		Never	Sometimes	Often	Usually/Always	More often	Less often	Just right
6	How often did he or she answer your questions or give you advice about how to solve your problems?	1	2	3	4	1	2	3
7	How often could you use him or her as examples of how to deal with your problems?	1	2	3	4	1	2	3

B. Second, think about your close friends (or close family members). When answering the following questions, think about the 2 or 3 that you are closest to.

						Would have liked them to do this		
		Never	Sometimes	Often	Usually/Always	More often	Less often	Just right
1	How often did they really listen to you when you talked about your concerns or problems?	1	2	3	4	1	2	3
2	How often did you feel that they were really trying to understand your problems?	1	2	3	4	1	2	3
3	How often did they try to take your mind off your problems by telling jokes or chattering	1	2	3	4	1	2	3

	about other things?							
4	How often did they really make you feel loved?	1	2	3	4	1	2	3
						Would you like them to do this		
		Never	Sometimes	Often	Usually/Always	More often	Less often	Just right
5	How often did they help you in practical ways, like doing things for you or lending you money?	1	2	3	4	1	2	3
6	How often did they answer your questions or give you advice about how to solve your problems?	1	2	3	4	1	2	3
7	How often could you use them as examples of how to deal with your problems?	1	2	3	4	1	2	3

C. Lastly, think about your peers (people that are close to you in age and are also students).

		Never	Sometimes	Often	Usually/Always	More often	Less often	Just right
1	How often did they really listen to you when you talked about your concerns or problems?	1	2	3	4	1	2	3
2	How often did you feel that they were really	1	2	3	4	1	2	3

	trying to understand your problems?							
3	How often did they try to take your mind off your problems by telling jokes or chattering about other things?	1	2	3	4	1	2	3
						Would you like them to do this		
		Never	Sometimes	Often	Usually/Always	More often	Less often	Just right
4	How often did they help you in practical ways, like doing things for you or lending you money?	1	2	3	4	1	2	3
5	How often did they answer your questions or give you advice about how to solve your problem?	1	2	3	4	1	2	3
6	How often could you use them as examples of how to deal with your problems?	1	2	3	4	1	2	3

Relationship Assessment Scale

	Not satisfied 1	2	Moderately satisfied 3	4	Highly satisfied 5
How well does your friend meet your needs?	1	2	3	4	5
In general, how satisfied are you with your relationship?	1	2	3	4	5
How good is your relationship compared to most?	1	2	3	4	5
How often do you wish you hadn't gotten into this relationship?	1	2	3	4	5
To what extent has your relationship met your original expectations?	1	2	3	4	5
How much do you love your friend?	1	2	3	4	5
How many problems are there in your relationship?	1	2	3	4	5

ROCI-II

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1 In *	I try to investigate an issue with my friend to find a solution acceptable to us.	1	2	3	4	5
2 O	I generally try to satisfy the needs of my friend.	1	2	3	4	5
3 A	I attempt to avoid being "put on the spot" and try to keep my conflict with my friend to myself.	1	2	3	4	5
4 In	I try to integrate my ideas with those of my friend to come up with a decision jointly.	1	2	3	4	5
5	I give some to get some.	1	2	3	4	5
6 In	I try to work with my friend to find solutions to a problem which satisfy our expectations.	1	2	3	4	5
7 A	I usually avoid open discussion of my differences with my friend.	1	2	3	4	5

* In=Integrating; A=Avoiding; D=dominating; O=obliging; C=compromising

8	I usually hold on to my solution to a problem.	1	2	3	4	5
9 C	I try to find a middle course to resolve an impasse.	1	2	3	4	5
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
10 D	I use my influence to get my ideas accepted.	1	2	3	4	5
11 D	I use my authority to make a decision in my favor.	1	2	3	4	5
12 O	I usually accommodate the wishes of my friend.	1	2	3	4	5
13 O	I give in to the wishes of my friend.	1	2	3	4	5
14	I win some and I lose some.	1	2	3	4	5
15 In	I exchange accurate information with my friend to solve a problem together.	1	2	3	4	5
16	I sometimes help my friend to make a decision in her favor.	1	2	3	4	5
17 O	I usually allow concessions to friend.	1	2	3	4	5
18 D	I argue my case with my friend to show the merits of my position.	1	2	3	4	5
19	I try to play down our differences to reach a	1	2	3	4	5

	compromise.					
20 C	I usually propose a middle ground for breaking deadlocks.	1	2	3	4	5
21 C	I negotiate with my friend so that a compromise can be reached.	1	2	3	4	5
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
22 A	I try to stay away from disagreement with my friend	1	2	3	4	5
23 A	I avoid an encounter with my friend.	1	2	3	4	5
24 D	I use my expertise to make a decision in my favor.	1	2	3	4	5
25 O	I often go along with the suggestions of my friend.	1	2	3	4	5
26 C	I use “give and take” so that a compromise can be made.	1	2	3	4	5
27 D	I am generally firm in pursuing my side of the issue.	1	2	3	4	5
28 In	I try to bring all our concerns out in the open so that the issues can be resolved in the best possible way.	1	2	3	4	5
29 In	I collaborate with my friend to come up with decisions	1	2	3	4	5

	acceptable to us.					
30 O	I try to satisfy the expectations of my friend.	1	2	3	4	5
31 D	I sometimes use my power to win a competitive situation.	1	2	3	4	5
32 A	I try to keep my disagreement with my friend to myself in order to avoid hard feelings.	1	2	3	4	5
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
33 A	I try to avoid unpleasant exchanges with my friend.	1	2	3	4	5
34	I generally avoid an argument with my friend.	1	2	3	4	5
35 In	I try to work with my friend for a proper understanding of a problem.	1	2	3	4	5