Sex Differences in the Role of Peer Relationships in Buffering Victimized Early Adolescents from Depressed Affect

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ABSTRACT

Sex Differences in the Role of Peer Relationships in Buffering Victimized Early Adolescents from Depressed Affect

Caroline Doramajian

The present study explored sex differences in the strength of several peer support measures as moderators of the association between peer victimization and depressed affect. Peer reports of depressed affect, victimization, and friendship were obtained from 430 early adolescents attending fifth or sixth grade (222 boys and 208 girls; mean age of 11 years). Peer acceptance was defined as the number of friendship nominations received from peers, with high scores suggesting a greater potential for interactions within a larger peer group. Mutual friendship was based on reciprocated first or second best friend choices and represents an exclusive dyadic peer experience. Friendship quality was assessed by asking participants to rate positive and negative features of their best friendships in order to gauge the content and provisions of close peer relationships. Structural equation modeling was conducted to determine the moderating effects of the peer support variables. Hypotheses were based on observed and conceptualized sex differences in peer relationship styles which suggest that girls have a greater preference for dyadic relationships while boys have a greater preference for larger peer group experiences. As expected, peer acceptance buffered the effects of victimization for boys but not for girls and having a mutual friend buffered the effects of victimization for girls but not for boys. High quality friendships were found to be equally protective for victimized boys and girls. Discerning such sex-linked moderating factors may contribute to the design and adaptation of interventions aimed at curbing the emerging prevalence of depression during adolescence.
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# Table of Contents

List of Figures .................................................................................................................. vi

List of Tables ..................................................................................................................... vii

Introduction ...................................................................................................................... 1

Method .............................................................................................................................. 11

Participants ....................................................................................................................... 11

Procedure ......................................................................................................................... 11

Measures ........................................................................................................................ 12

Design ............................................................................................................................... 16

Results ............................................................................................................................. 17

Preliminary Analyses .................................................................................................... 17

Structural Equation Modeling ....................................................................................... 19

Discussion ....................................................................................................................... 28

Conclusions .................................................................................................................... 38

References ...................................................................................................................... 40

Appendix A: Information Letter ..................................................................................... 50

Appendix B: Parental Consent Form ............................................................................. 53

Appendix C: Child Consent Form .................................................................................. 55

Appendix D: Sociometric Nominations ........................................................................ 57

Appendix E: Peer Assessment ....................................................................................... 59

Appendix F: Network of Relationships Inventory ....................................................... 67
List of Figures

Figure 1. Conceptual model of expected sex differences ........................................... 10

Figure 2. Structural equation model ......................................................................... 21

Figure 3. Results for the full sample path analytic model ......................................... 23

Figure 4. Results for the final multiple group path analytic model (girls versus boys) ................................................................. 26

Figure 5. Depressed affect in girls as a function of victimization and acceptance ........ 27

Figure 6. Depressed affect in boys as a function of victimization and acceptance ....... 27

Figure 7. Depressed affect in girls as a function of victimization and mutual friendship ........................................................................................................... 29

Figure 8. Depressed affect in boys as a function of victimization and mutual friendship ........................................................................................................... 29
List of Tables

Table 1. Sample items and internal consistencies of the friendship quality scales........ 15

Table 2. Means and standard deviations of the friendship quality scales and factors......................................................................................................................... 18

Table 3. Pearson correlation coefficients............................................................................. 20
Sex Differences in the Role of Peer Relationships in Buffering Victimized Early Adolescents from Depressed Affect

Peer victimization, which may involve physical, verbal, or relational attacks is a serious and common problem faced by youth in school settings (Rigby, 2000; Smith & Shu, 2000). This form of maltreatment has consistently been linked with subclinical depressive symptoms during childhood and adolescence (Hawker & Bouton, 2000). In turn, depressive symptoms in youth have been found to predict future clinical depression (Rutter, Kim-Cohen, & Maughan, 2006), which is a leading cause of disability on a global scale (Murray & Lopez, 1996). Identifying mechanisms that underlie the link between early interpersonal stressors such as peer victimization and depressive symptoms is an essential step toward the development of strategies to curb the prevalence of this debilitating mental health problem.

The transition to adolescence stands out as a critical period for investigating factors associated with depression and depressive symptoms. Epidemiological evidence indicates that prevalence rates of clinical depression rise sharply during adolescence, especially in girls (Avenevoli, Knight, Kessler, & Merikangas, 2008). This developmental trend highlights the importance of searching for protective factors in the early adolescent environment. Moreover, the occurrence of sex differences in prevalence rates underscores the necessity of understanding how protective factors may differ for boys and for girls. Increasing interactions with agemates during childhood and into adolescence point toward the peer group as an important context to consider when examining the course of depression. Indeed, peers become more salient socializing agents during the transition to adolescence (Rubin, Bukowski, & Parker, 2006), which increases
their potential to intensify, but also to dampen risk for depression. That is, peers may exacerbate normative challenges faced by early adolescents (e.g., the onset of puberty, transition to high school) through peer-related stress such as victimization, but they may also socialize gains through positive peer experiences. Thus, detriments that occur within the peer context may interact with protective factors within the same context.

Although the risks associated with peer victimization are well known, research on protective factors, especially those that may be sex-linked, is more limited. The current study was designed to extend the small but growing literature on sex differences in the role of positive peer experiences in buffering against depressive symptoms. The intention was to clarify the types of peer support that might best protect victimized girls and boys from depressed affect. The ultimate objective of gathering this knowledge was to inform accurate and timely interventions to decrease the prevalence of depression.

Hypotheses were guided by conceptual and observed sex differences in peer relationship styles (Leaper, 1994; Maccoby, 1998) which suggest that girls may receive greater benefits from dyadic relationships while boys may gain more from larger peer group acceptance. Unlike previous studies that have explored peer support as a moderator of victimized children’s risk for depressive symptoms (e.g., Hodges, Boivin, Vitaro, & Bukowski, 1999; Hodges, Malone, & Perry, 1997; Schmidt & Bagwell, 2007), the current study isolated the independent effects of dyadic and group-level peer experiences such that potential sex differences in peer relationship processes might be detected.

The low prevalence estimates of clinical depression during early adolescence, especially in community samples (12 month prevalence of 1-3%; Avenevoli et al., 2008), suggest that a clearer view of how depression unfolds during the developmental transition
into adolescence requires looking at subclinical symptoms rather than clinically diagnosed depression. The community sample in the present study was recruited from several local public schools which, in contrast to a clinical sample, provides a more naturalistic and unbiased representation of the social landscape that influences the eventual rise in prevalence rates of clinical depression in the general adult population (12 month prevalence of 8-17% for young adults; Avenevoli et al., 2008). Further, the goal of this study was not to look for sex differences in depression levels during early adolescence, which have been found to be similar for boys and girls (Flemming, Offord, & Boyle, 1989; Kashani et al., 1983). Rather, the goal was to investigate factors that might weaken the association between interpersonal stress and depressed affect for boys and girls.

Studying depression is not only important because of the actual emotional distress that it entails, but also because it is related to dysfunction in many life areas. Depression during youth is associated with poorer school and work performance, greater difficulties with family and friends, and impaired cognitive functioning (Kessler & Walters, 1998; Reinherz, Giaconia, Lefkowitz, Pakiz, & Frost, 1993). In addition, adolescent depression, including subclinical symptoms, is a strong indicator of adult depression (Rutter et al., 2006). Furthermore, longitudinal studies have identified reciprocal influences between stressors and depression during childhood and adolescence (Grant, Compas, Thurm, McMahon, & Gipson, 2004; Vernberg, 1990). When one also considers evidence of depression contagion occurring in the context of interpersonal relationships (Hankin, Wetter, & Cheely, 2008) and the intergenerational risk posed to children of depressed parents (Hammen, Burge, Burney, & Adiran, 1990; Rice, Harold, & Thapar, 2002), it
becomes clear that depression is involved in a vicious cycle of maladjustment that perpetuates across development and extends to others within an individual’s social system.

The etiology of depression is complex and likely involves multiple biopsychosocial factors that are transactional in nature (Hankin & Abramson, 2001). While specific causal mechanisms may be difficult to disentangle, depressive symptoms undoubtedly arise and are maintained within an interpersonal context. Increasing interactions with peers from childhood into adolescence (Rubin et al., 2006) implicates peer victimization as an important risk factor to consider. Indeed, there is ample evidence supporting a concurrent link between peer victimization and depressed affect (for a meta-analysis, see Hawker & Boulton, 2000). The few longitudinal studies that have addressed the long-term consequences of serious peer victimization have concluded that former victims are at greater risk for depression in young adulthood (Olweus, 1992; Rigby, 1999).

While victimized youth may find solace in family support or friendships outside of the school context, the fact that peer victimization mainly occurs at school makes such abuse and its negative consequences a societal problem. Understanding the role of peers in protecting victimized youth from depression offers vital information for school officials and students to intervene against a problem that predominantly occurs in the school setting.

According to Sullivan (1953), the transition to adolescence is especially opportune for peers to serve a protective function against maladjustment. He attributed peers’ protective ability to the maturation of the need for interpersonal intimacy, which is...
manifested through a deep interest in forming a close friendship with a same-sex peer. These more mature friendships provide an intimate field of interaction characterized by enough security to express all aspects of the self – including one’s warped or maladaptive tendencies – and to see oneself through the eyes of that special friend. In turn, the recognition of one’s true worth through consensual validation sets the stage for social accommodation and personal growth, and the eventual reduction of previously acquired maladaptive tendencies (e.g., depressive tendencies from unhealthy parent-child relationships). Sullivan’s theory offers a possible explanation for why certain interpersonally at-risk children, such as those who are victimized by peers, suffer negative psychosocial outcomes while others do not. Specifically, those who are protected from maladjustment may have had the chance to engage in corrective interpersonal experiences with peers during the transition to adolescence.

Although Sullivan’s (1953) claim that close friendships may rectify maladaptive tendencies acquired from early interpersonal difficulties has not been fully tested, evidence supporting the positive role of friendship is abundant. Children who have a reciprocated or mutual friendship (Bukowski, Hoza, & Boivin, 1993; Parker & Asher, 1993; Windle, 1994), as well as children with high quality friendships such as those that offer validation (Oldenburg & Kerns, 1997) appear to be at lower risk for internalizing symptoms. Beyond these direct effects, there is also evidence to suggest that mutual friendship may moderate the association between victimization and internalizing behaviors concurrently (Hodges et al., 1997) and over time (Hodges et al., 1999). Findings are mixed with regard to the role of friendship quality as a moderator of victimized children’s risk for depression. Some studies have actually shown that certain
positive qualities such as companionship may amplify risk for maladjustment (Hodges et al., 1997). Such cases have illustrated that positive social provisions may be associated with potential negative “tradeoffs” when they occur in excessive amounts (Rose & Rudolph, 2006), and that these processes may be different for boys and girls (e.g., co-rumination for girls; Rose, 2002).

While there is evidence for the corrective effects of positive peer relationships, less is known about whether some of these processes are sex-linked. As aforementioned, the emergence of sex differences in the prevalence of depression during adolescence urges the investigation of sex differences in protective factors. Although Sullivan (1953) recognized that socio-cultural forces make it unlikely for his postulates to be equally valid for males and females, he did not venture to speculate on how they might differ. More recently, Rose and Rudolph’s (2006) peer-socialization model offers some clues. This model expands on earlier claims (Leaper, 1994; Maccoby, 1998) that frequent same-sex peer interactions during childhood (Bukowski, Gauze, Hoza, & Newcomb, 1993; Maccoby & Jacklin, 1987; Martin & Fabes, 2001) create distinct social environments for boys and girls, and that these set the stage for the emergence of sex-specific peer relationship processes or styles. In turn, these distinct peer relationship styles may account for sex differences in the development of adjustment problems (Rose & Rudolph, 2006).

An examination of several aspects of peer interactions offers evidence that the larger peer group may be more important for boys than for girls. For instance, boys interact within larger peer groups more frequently than do girls (Benenson, Apostoleris, & Parnass, 1997; Ladd, 1983; Lever, 1976, 1978), and these boy groups seem to contain
a denser or more interconnected network of friendships than girls’ peer groups (Benenson, 1990; Parker & Seal, 1996). It also appears that interacting in larger peer groups and being popular may go hand in hand in boys’ groups, but not in girls’ groups (Ladd, 1983). Moreover, the content of boys’ interactions within these larger groups appears to be characterized by organized and competitive play (Lever, 1978; Moller, Hymel, & Rubin, 1992; Zarbatany, McDougall, & Hymel, 2000), which may indicate the presence of clearer dominance hierarchies among boys’ than girls’ groups (Omark, Omark, & Edelman, 1975; Savin-Williams, 1979). This finding is consistent with boys’ greater endorsement of dominance goals (Jarvinen & Nicholls, 1996) and suggests that higher social status among the larger peer group may be more meaningful for boys.

With regard to girls, several theoretical frameworks have conceptualized females as having a greater relational orientation style characterized by a focus on close relationships as a major source of self-definition and self-evaluation (e.g., Buhrmester, 1996; Cross & Madson, 1997; Helgeson, 1994; Maccoby, 1990). Compared to boys, the content of girls’ dyadic interactions is more extensive in terms of greater self-disclosure with friends (Burhmester & Furman, 1987; Camarena, Sarigiani, & Peterson, 1990; Crockett, Losoff, & Peterson, 1984). By early adolescence, girls report caring more about having dyadic friendships than do boys (Benenson & Benarroch, 1998) and they begin to endorse more goals involving intimacy and nurturance than do boys (Jarvinen & Nicholls, 1996). During adolescence, girls are more interested than boys in social goals such as having friends versus nonsocial goals such as obtaining good grades (Ford, 1982). Finally girls not only perceive a greater number of friends to go to for support
but they also give greater importance to supportiveness within their friendships than do boys (Demaray & Malecki, 2003).

Consistent with sex differences in peer relationship styles, girls report receiving greater social and emotional benefits from their dyadic friendships than do boys. These include features such as closeness and security (Bukowski, Hoza, & Boivin, 1994), affection and enhancement of worth (Furman & Buhrmester, 1985), validation (Parker & Asher, 1993), and acceptance (Crockett et al., 1984). Yet, boys tend to report as much satisfaction within their friendships (Crockett et al., 1984; Furman & Buhrmester, 1985; Parker & Asher, 1993), which suggests that the features that boys value in their relationships with peers may not be fully captured when solely measuring the provisions of dyadic friendships (Rose & Rudolph, 2006).

Based on this review, girls appear to receive and value social and emotional provisions of friendships more than do boys and should therefore be afforded greater protection from emotional distress (as postulated by Sullivan, 1953). However, considering that peer relationship processes that may hold greater meaning for boys are understudied, and that negative tradeoffs may weaken the benefits of close friendships, it is not surprising that results from the limited literature that has explored sex differences in the association between friendship quality and internalizing problems has been mixed. Some studies have found the link to be stronger for girls (e.g., Moran & Eckenrode, 1991) while others have found it to be as strong or stronger for boys (e.g., Hussong, 2000; Windle, 1992). In some studies, conclusions about sex differences depended on the aspect of friendship quality being considered (e.g., Oldenburg and Kerns, 1997).
The even more limited research investigating sex differences in friendship quality as a moderator of the association between peer victimization and emotional distress is also mixed. For instance, Schmidt and Bagwell (2007) found sex differences in the moderating effect of friendship security (beneficial for girls, detrimental for boys) and friendship closeness (detrimental for girls, no effect for boys), which again demonstrates the potential tradeoffs of positive social provisions and how these may differ for boys and for girls.

The present study was designed to narrow the gap between research on sex differences in peer relationship styles and research on sex differences in emotional adjustment. This goal was pursued in a study of the role of peer acceptance, mutual friendship, and friendship quality in buffering victimized early adolescent boys and girls from depressive symptoms. Unlike any available study to date, dyadic and group level peer support measures were studied in a way that isolated their independent contributions as moderators of the link between peer victimization and depressed affect. Figure 1 graphically illustrates the conceptualized sex differences.

Hypotheses were formulated on the premise that girls prefer dyadic relationships while boys prefer larger peer group acceptance. Accordingly, peer acceptance was expected to buffer victimized boys but not victimized girls from depressed affect (hypothesis 1). In contrast, having a mutual friend was expected to buffer victimized girls but not victimized boys from depressed affect (hypothesis 2). Importantly, these differences were expected after controlling for the effects of other predictors on depressed affect. Hypothesis 2 was posited despite previous research that has not identified sex differences in the moderating effect of mutual friendship (e.g., Hodges et
Figure 1. Conceptual model of expected sex differences.
al, 1999) because, as aforementioned, the current study was designed in a way that might differentiate boys from girls. No specific sex differences were hypothesized with regard to the moderating role of friendship quality due to the mixed findings to date. Nonetheless, friendship quality was included in the model as it represents a distinct aspect of peer relationships (Erdley, Nangle, Newman, & Carpenter, 2001; Hartup, 1996; Parker & Asher, 1993). In line with the findings reported by Hodges et al. (1999) and Schmidt and Bagwell (2007), sex differences were not expected in the association between victimization and depressed affect. In summary, the objective of the current investigation was to clarify aspects of peer support that may be most beneficial for early adolescent boys and girls, especially in terms of reducing depressed affect associated with peer victimization.

Method

Participants

The sample consisted of 430 early adolescent boys (n = 222) and girls (n = 208) attending 5th or 6th grade and recruited from three public English-speaking elementary schools in the Montreal region (Mean age = 10.87 years, SD = .73; no mean differences in age between boys and girls). Data was collected at two time points less than one week apart several months into the 2005-2006 school year in order to allow children to become familiar with their classrooms. From the potential pool of participants, 88% (430/491) participated at Time 1, and 86% (424/491) participated at Time 2.

Procedure

The recruitment procedure involved obtaining permission from the local school boards and school principals to carry out the study. Then, the research team informed
potential participants about the project in their classrooms and gave them a letter
describing the study (see Appendix A) as well as a parental consent form to take home
(see Appendix B). Written consent was also obtained from the participants during the
first data collection (see Appendix C). As part of a larger project on peer relationships
and well-being, participants were asked to complete a set of questionnaires during two
one-hour sessions (within the same week). Only measures relevant to the present study
are described in this report. Questionnaires were group administered to the participating
students in their homerooms by graduate students and research assistants. Prior to testing,
participants were reminded that their answers were confidential and that they could stop
at any time. Each participant received an honorarium worth 10$ and a t-shirt that bore the
lab logo.

As described below, a sociometric nomination procedure was used to identify
children who had a mutual friend and to determine children’s sociometric status (peer
acceptance) within their same-sex classroom. In addition, a peer nomination procedure
was used to assess various indices of individual and social adjustment by asking
participants to assign other participating students to a series of items describing
psychosocial and behavioral characteristics. The nominations received by each adolescent
were summed and categorized in subscales. The subscales relevant to this study are peer
victimization and depressed affect. Participants were also asked to report on the quality of
their best friendships using a self-report questionnaire.

Measures

Sociometric nomination (see Appendix D). This questionnaire consisted of a list
of all the participants in the class arranged in two columns, one listing the boys’ names
and another listing the girls’ names. Participants were asked to rank order their
participating friends by indicating in a box next to the classmates’ names a ‘1’ for their
first best friend, ‘2’ for their second best friend, ‘3’ for their third best friend, and ‘4’ for any other friend. Participants were told to only choose one first best friend, one second best friend, and one third best friend. Also, they were free to indicate as many friends as they wished, identifying them with a ‘4’. The rank ordering was done separately for male and female friends. Given that same-sex preference exists from childhood into adolescence (Sippola, Bukowski, & Noll, 1997), only same-sex friendship nominations were considered in this study. Two variables were derived from this tool: Peer acceptance and Mutual friendship. Peer acceptance was defined as the total number of friendship nominations that a child received from his or her same-sex peers, without regard for whether it was a first, second, third, or fourth choice. Mutual friendship was a dichotomous measure (‘friended’ coded as ‘1’ or ‘unfriended’ coded as ‘0’) indicating whether or not a child’s first best friend or second best friend had chosen the child as a first or second best friend.

Peer assessment (see Appendix E). Based on a similar task to the one used in the Revised Class Play (Masten, Morison, & Pellegrini, 1985), participants were given a list of the names of every participating student in the same classroom and a series of statements describing characteristics that corresponded to multiple indices of adjustment. Students were asked to assign each descriptive characteristic to the students on the list. They could choose as many classmates as they wanted, not including themselves. The nominations received by each participant by same-sex peers were summed and categorized in subscales. The following subscales were relevant to this study: Peer victimization (3 items; $\alpha = .88$; “Others try to hurt him/her,” “Others do mean things to him/her,” “Others call him/her bad names”), and Depressed affect (4 items; $\alpha = .88$; e.g., “Someone who is unhappy,” “Someone who is sad,” “Someone who is in a bad mood,”
"Someone who is not in a good mood"). Only same-sex nominations were used because the greater frequency of same-sex peer interactions was assumed to lend greater validity to same-sex peer assessments of social and behavioral descriptions (Coie, Dodge & Coppotelli, 1982).

Network of Relationships Inventory (see Appendix F). Children completed an adapted version of the Network of Relationships Inventory (NRI: Furman & Buhrmester, 1985, 1992) which assessed 12 qualities of their relationships with their mother, their father, and their best friend at school. This tool was inspired by Weiss's (1974) theory that states that individuals seek specific social provisions in their relationships with others. Participants were asked to rate their relationships on a standard five-point Likert scale on questions designed to assess the frequency or amount of several positive and negative qualities provided by the relationship in question. Depending on the item, the '1' to '5' response choices were: 'almost never' to 'almost always,' 'little' to 'a lot,' or 'not at all' to 'extremely.' For the present study, the interest was to determine children's perceptions of seven positive qualities (i.e., support provisions) provided by their closest friend at school as well as three negative forms of interaction that may occur within this friendship. Responses to three items assessing each relationship feature were averaged, thus yielding seven positive and three negative scale scores. The list of support provisions and negative interactions examined in this study are listed in Table 1 along with sample items and the internal consistencies of the scale scores. As indicated, the consistencies are satisfactory (Mean $\alpha = .77$) and are in line with previous findings (Furman & Buhrmester 1985, 1992).
Table 1.

*Sample items and internal consistencies of the friendship quality scales*

<table>
<thead>
<tr>
<th>Sample item</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support provisions</strong></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td></td>
</tr>
<tr>
<td>“How often do you turn to this person for support with personal problems?”</td>
<td>.79</td>
</tr>
<tr>
<td>Intimacy</td>
<td></td>
</tr>
<tr>
<td>“How much do you share your secrets and private feelings with this person?”</td>
<td>.80</td>
</tr>
<tr>
<td>Companionship</td>
<td></td>
</tr>
<tr>
<td>“How often do you play and have fun with this person?”</td>
<td>.63</td>
</tr>
<tr>
<td>Nurturance</td>
<td></td>
</tr>
<tr>
<td>“How much does this person take care of you?”</td>
<td>.80</td>
</tr>
<tr>
<td>Affection (other to self)</td>
<td></td>
</tr>
<tr>
<td>How much does this person like or love you?</td>
<td>.87</td>
</tr>
<tr>
<td>Affection (self to other)</td>
<td></td>
</tr>
<tr>
<td>“How much do you like or love this person?”</td>
<td>.88</td>
</tr>
<tr>
<td>Reliable alliance</td>
<td></td>
</tr>
<tr>
<td>“How sure are you that this relationship will last no matter what?”</td>
<td>.73</td>
</tr>
<tr>
<td><strong>Negative interactions</strong></td>
<td></td>
</tr>
<tr>
<td>Conflict</td>
<td></td>
</tr>
<tr>
<td>“How often do you and this person disagree and argue?”</td>
<td>.76</td>
</tr>
<tr>
<td>Antagonism</td>
<td></td>
</tr>
<tr>
<td>“How much do you and this person hassle or nag one another?”</td>
<td>.70</td>
</tr>
<tr>
<td>Criticism</td>
<td></td>
</tr>
<tr>
<td>“How often does this person identify your weaknesses or put you down?”</td>
<td>.80</td>
</tr>
</tbody>
</table>

15
Intercorrelations between the positive scales were all positive and significant (Pearson correlation coefficients ranging from .41 to .92; all \( p < .05 \)). Intercorrelations between the negative scales were also all positive and significant (Pearson correlation coefficients ranging from .54 to .73; all \( p < .05 \)). A factor analysis extracted two factors that accounted for 60% of shared variance in the scale scores. This analysis revealed that the positive scales loaded strongly onto one factor (eigenvalue of 4.41) while the negative scales loaded onto another factor (eigenvalue of 1.64). The factor loadings ranged from .54 to .86.

These results correspond to two dimensions usually derived from the NRI: a support factor and a negativity factor. Thus, the mean of the seven positive scales was used as a composite measure of friendship support provisions (Support factor; \( \alpha = .90 \)) and the mean of the three negative scales was used as a composite measure of negative interactions (Negativity factor; \( \alpha = .83 \)). In this study, Friendship quality was calculated by subtracting the negativity factor from the support factor. As such, high quality friendships were characterized by high levels of positive and low levels of negative features.

**Design**

The goal of the data analyses was to examine the independent contributions of various peer support variables (i.e., peer acceptance, mutual friendship, and friendship quality) in moderating the association between victimization (predictor) and depressed affect (outcome) for boys and for girls. To test the hypotheses of this study, a series of multiple group (boys and girls) structural equation models were created using Mplus (Múthen & Múthen, 2007). Preliminary analyses were performed using SPSS v.15 to...
yield means and standard deviations, bivariate correlations, and test statistics to assess mean level sex differences.

Results

In order to correct for differences in the number of raters that could potentially nominate a student, the nominations that a student received were standardized within his or her group of same-sex participating class. This procedure was used with the measure of peer victimization, depressed affect, and peer acceptance. While standardization masks between-classroom differences in the level of these variables, it does not affect the main objective of the present study, which was to examine overall differences in the associations among variables. Interaction terms were created using standardized scores for peer-nominated measures and centered scores for the other measures (i.e., mutual friendship and friendship quality) as delineated by Aiken and West (1991).

Preliminary Analyses

The means and standard deviations of the scores on the friendship quality scales and factors were computed and are shown in Table 2. Univariate tests revealed that girls reported slightly higher levels of positive friendship features on all scales; all \( p < .05, \eta_p^2 \) ranging from 1% to 12%. There were no significant differences between boys and girls on the negative friendship features.

Univariate analyses were performed to test for sex differences on some of the final study variables. On average, most children had a mutual friend and there were no mean differences in mutual friendship between girls \((M = .75, SD = .43)\) and boys \((M = .72, SD = .45)\): \( F(1, 428) = .62, p > .05 \). For the overall measure of friendship quality which was calculated as the support factor minus the negativity factor, girls reported
Table 2.

Means and standard deviations of the friendship quality scales and factors

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Support factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>4.06 (0.78)</td>
<td>3.46 (0.83)</td>
</tr>
<tr>
<td>Intimacy</td>
<td>3.71 (1.12)</td>
<td>2.78 (1.14)</td>
</tr>
<tr>
<td>Companionship</td>
<td>4.18 (0.80)</td>
<td>3.98 (0.83)</td>
</tr>
<tr>
<td>Nurturance</td>
<td>3.88 (0.99)</td>
<td>3.23 (1.12)</td>
</tr>
<tr>
<td>Affection (other to self)</td>
<td>4.29 (0.88)</td>
<td>3.52 (1.15)</td>
</tr>
<tr>
<td>Affection (self to other)</td>
<td>4.49 (0.81)</td>
<td>3.82 (1.11)</td>
</tr>
<tr>
<td>Reliable alliance</td>
<td>4.05 (0.96)</td>
<td>3.85 (0.98)</td>
</tr>
<tr>
<td>Negativity factor</td>
<td>1.76 (0.73)</td>
<td>1.77 (0.67)</td>
</tr>
<tr>
<td>Conflict</td>
<td>1.95 (0.92)</td>
<td>1.91 (0.83)</td>
</tr>
<tr>
<td>Antagonism</td>
<td>1.79 (0.89)</td>
<td>1.77 (0.77)</td>
</tr>
<tr>
<td>Criticism</td>
<td>1.54 (0.70)</td>
<td>1.62 (0.71)</td>
</tr>
</tbody>
</table>
higher levels of friendship quality ($M = 2.32, SD = 1.17$) than did boys ($M = 1.70, SD = 1.21$): $F(1, 415) = 27.83, p < .05, R^2 = .06$. Note that means and standard deviations of peer nominated measures are not examined as these were standardized.

Pearson correlation coefficients between all study variables are given in Table 3 for girls and for boys. As expected from previous research, there was a large overlap between victimization and depressed affect for both boys and girls (Hawker & Boulton, 2000). In addition, higher peer acceptance and having a mutual friend were related to lower depressed affect and lower peer victimization. However, friendship quality was not related to either variable. In terms of intercorrelations among the peer support variables, all three measures were positively associated for girls while for boys, only the association between peer acceptance and mutual friendship was significant. This finding suggests that compared to boys, girls perceive higher quality in friendships that are closely reciprocated. In all cases, the associations were modest, suggesting that peer acceptance, mutual friendship, and friendship quality represent different aspects of peer relationships and that there is value to analyzing them as distinct measures.

*Structural Equation Modeling*

Structural equation modeling conducted with M-Plus (Múthen & Múthen, 2007) was used to examine whether peer acceptance, mutual friendship, and friendship quality moderated the association between victimization and depressed affect differently for boys and for girls. The overall model is illustrated in Figure 2. Path coefficients obtained from the analyses described below represent unique and independent associations between the variables. This model controlled for covariance between the exogenous predictors, although for clarity they are not indicated on the figure.
Table 3.

*Pearson correlation coefficients*

<table>
<thead>
<tr>
<th></th>
<th>Depressed affect</th>
<th>Victimization</th>
<th>Acceptance</th>
<th>Mutual friendship</th>
<th>Friendship quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressed affect</td>
<td>-</td>
<td>.55*</td>
<td>-.33*</td>
<td>-.27*</td>
<td>-.11</td>
</tr>
<tr>
<td>Victimization</td>
<td>.60*</td>
<td>-</td>
<td>-.31*</td>
<td>-.21*</td>
<td>-.04</td>
</tr>
<tr>
<td>Acceptance</td>
<td>-.49*</td>
<td>-.41*</td>
<td>-</td>
<td>.28*</td>
<td>.17*</td>
</tr>
<tr>
<td>Mutual friendship</td>
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<td>-.16*</td>
<td>.36*</td>
<td>-</td>
<td>.15*</td>
</tr>
<tr>
<td>Friendship quality</td>
<td>.00</td>
<td>.09</td>
<td>-.01</td>
<td>.01</td>
<td>-</td>
</tr>
</tbody>
</table>

Values above the diagonal for girls and below the diagonal for boys; * $p < .05$. 

20
Figure 2. Structural equation model.
**Full sample model.** An observed variable model using the entire sample was a good fit to the data \( \chi^2 (6) = 4.19, p > 0.05, \text{CFI} = 1.00, \text{RMSEA} = 0.00 \). The standardized path coefficients obtained from the analysis using the full sample are shown in Figure 3. There was a reduction in the strength of association between victimization and depressed affect with the inclusion of peer support measures: zero order correlation of \( r = .57 \) versus \( \beta = .41 \) in this model. Next, peer acceptance had a main effect on depressed affect and also significantly moderated the association between victimization and depressed affect. Friendship quality did not have a main effect on depressed affect but was a significant moderator of the association between victimization and depressed affect. Supplementary analyses revealed that friendship quality only moderated this link when negative features were taken into account. That is, when only the support factor of friendship quality was used, the moderating effect of friendship quality disappeared. This finding suggests that the benefits of friendship quality as a moderator are driven by a lack of negative interactions with one’s best friend. Finally, after controlling for these peer support measures, mutual friendship did not have a main or moderating effect on depressed affect. This model accounted for 41% of variance in depressed affect.

**Multiple Group Model – Unconstrained.** The model was then tested in each group (boys and girls). The unconstrained multiple group model was a good fit to the data \( \chi^2 (12) = 8.49, p > 0.05, \text{CFI} = 1.00, \text{RMSEA} = 0.00 \) and was not significantly different from the full sample model \( \Delta \chi^2 (6) = 4.29, p > .05 \). In order to identify the associations on which boys and girls might differ, a series of multiple group path analyses were performed in which the coefficients of each path were constrained to be equal for boys and girls, one constrained path per analysis.
Figure 3. Results for the full sample path analytic model.

Standardized path coefficients (beta weights) and variance explained by each model path ($R^2$ in percentage); * $p < .05$. 

Peer Acceptance 
- .20*

Victimization
- .41* 
21%*

Mutual Friendship
- .02
9%*

Friendship Quality
- .02

Vic X Accept
- .15*

Vic X Mutual Frd
- .04

Vic X Frd Qual
- .10*

Depressed Affect
41%*
Conclusions regarding sex differences were based on a comparison of the goodness of fit of these models to the unconstrained multiple group model using the Chi-squared distance test. That is, when constraining a path to be equal for boys and for girls significantly worsened the model’s fit to the data, even at trend level ($p < .10$), possible sex differences were assumed to exist on that path and it was left free to vary independently for boys and girls.

**Partially constrained multiple group model.** Based on the results of these iterative analyses, several paths were constrained to be equal for boys and girls (these are illustrated below in the description of the final model). This partially constrained multiple group model was a good fit to the data ($\chi^2(21) = 16.99, p > 0.05$, CFI = 1.00, RMSEA = 0.00) and was just as good a fit to the data as the unconstrained multiple group model ($\Delta\chi^2(9) = 8.51, p > .05$). To confirm whether sex differences did indeed exist on the paths that were not constrained to be equal for boys and girls, each of the paths that were left free were constrained one at a time along with the constrained paths of the partially constrained multiple group model. The goodness of fit of each of these models was compared to the partially constrained model using the Chi-squared distance test. These comparisons showed that constraining any of the paths that had been left free to vary for boys and girls significantly worsened the fit to the data, at least at trend level ($p < .10$). In particular, the fit to the data became significantly worse when the main effect of peer acceptance ($\Delta\chi^2(1) = 4.23, p < .05$), the main effect of mutual friendship ($\Delta\chi^2(1) = 4.65, p < .05$), and the moderating effect of peer acceptance ($\Delta\chi^2(1) = 9.80, p < .05$) on depressed affect were constrained to be equal for boys and girls. There was also a trend toward a decrease in the goodness of fit when the moderating effect of mutual friendship
on depressed affect was constrained to be equal for boys and for girls ($\Delta \chi^2 (1) = 2.80, p < .10$).

**Final model – Partially constrained multiple group model with fixations.** As a final test of the hypotheses of this study, two additional conditions were added to the previous model: the path coefficient representing the moderating effect of mutual friendship was fixed at zero for boys while the path coefficient representing the moderating effect of peer acceptance was fixed at zero for girls. This final model was a good fit to the data ($\chi^2 (23) = 17.06, p > 0.05$, CFI = 1.00, RMSEA = 0.00) and was just as good a fit to the data as the unconstrained multiple group model ($\Delta \chi^2 (11) = 8.57, p > .05$). Figure 4 gives the path coefficients and variance in depressed affect explained by each model path for girls and for boys, with dashed lines indicating the paths that were constrained to be equal for boys and for girls (i.e., no sex differences).

A comparison of Figures 3 and 4 illustrates that the multiple group analysis that explored sex differences revealed several findings that were masked by the results of the full sample model. Specifically, studying girls and boys separately revealed that the moderating effect of peer acceptance in buffering victimized early adolescents’ from depressed affect only applied to boys (significant sex difference), and that the main effect of peer acceptance on depressed affect was stronger for boys than for girls (significant sex difference). These differences may be visualized by comparing the regression lines illustrated in Figure 5 for girls and Figure 6 for boys.
Figure 4. Results for the final multiple group path analytic model (girls versus boys). Standardized path coefficients (beta weights) and variance explained by each model path ($R^2$ in percentage) for girls and for boys with values for boys in brackets. Dashed lines represent paths on which sex differences were not found (i.e., constrained paths), the dotted line represents a trend level sex difference, and the solid lines represent paths on which boys and girls were found to differ; * $p < .05$. 
**Figure 5.** Depressed affect in girls as a function of victimization and acceptance

High and low values are defined as one standard deviation above and below the mean.

**Figure 6.** Depressed affect in boys as a function of victimization and acceptance

High and low values are defined as one standard deviation above and below the mean.
The main effect of mutual friendship on depressed affect which appeared to be non-significant for all early adolescents emerged as significant for girls, but not for boys (significant sex difference). Also, the non-significant moderating effect of mutual friendship in the full sample emerged as significant in the multiple group analysis, but only for girls (trend-level sex difference). These differences may be visualized by comparing the regression lines illustrated in Figure 7 for girls and Figure 8 for boys.

Two findings from the final multiple group analysis were in accordance with the results of the full sample analysis. First, peer victimization was a significant predictor of depressed affect regardless of the sex of the targeted victim. Second, while friendship quality did not offer direct protection from depressed affect, it did weaken the association between victimization and depressed affect, and did so equally well for boys and girls. The final model accounted for 32% of variance in depressed affect for girls and 51% of variance in depressed affect for boys.

Discussion

The findings from the present study revealed that the types of peer support that buffer early adolescent girls and boys from depressed affect are in accordance with observed sex differences in peer relationship styles (Leaper, 1994; Maccoby, 1998). Specifically, a differential protective effect was found for mutual friendship in favor of girls and for peer acceptance in favor of boys. Results therefore support the hypothesis that apparent sex differences in preference for basic structural features of peer interactions, namely girls’ preference for dyadic interactions and boys’ preference for group-level interactions, have implications for emotional adjustment (Rose & Rudolph, 2006). Beyond the benefits of peer acceptance and mutual friendship, high quality
Figure 7. Depressed affect in girls as a function of victimization and mutual friendship
High and low values are defined as one standard deviation above and below the mean.

Figure 8. Depressed affect in boys as a function of victimization and mutual friendship
High and low values are defined as one standard deviation above and below the mean.
friendships also buffered victimized early adolescents from depressed affect, and did so equally well for boys and girls. This finding is in line with the hypothesis that high quality friendships, which presumably provide validating and intimate exchanges, offer early adolescents a corrective interpersonal experience that protects them from maladjustment (Sullivan, 1953).

While not the focus of the present investigation, it is worth mentioning that the robust finding of a concurrent association between peer victimization and depressive symptoms (Hawker & Boulton, 2000) was also replicated in this sample of early adolescents. In addition to emphasizing the emotional detriments that may be socialized within the peer context through peer victimization, findings from the present study also illustrated that peer support may co-occur and interact with victimization to reduce depressed affect. Importantly, sex differences were observed in the pattern of associations among these variables.

Although the predictive power of victimization on depressed affect was just as strong for boys as for girls, the role of peer support was found to vary as a function of sex. These differences were observed as both direct and corrective benefits. Direct benefits refer to the main effect of peer support on depressed affect. Corrective benefits refer to instances when peer support interacted with the negative experience of peer victimization such that the strength of the association between victimization and depressed affect was weakened. While the direct effects of peer support were of interest and will be discussed, the main focus of this study was to identify the types of peer support that would offer at-risk boys and girls a corrective experience that might reduce the negative emotional consequences of peer victimization. Such corrective or
moderating processes offer clues as to why some victimized youth become depressed while others do not.

As expected from the vast literature examining sex differences in peer relationship styles (for a review, see Rose & Rudolph, 2006), acceptance by the larger peer group was more beneficial to boys than to girls. Even though higher peer acceptance was associated with lower levels of depressed affect for girls, the strength of this direct association was stronger for boys. Oldenberg and Kerns (1997) found a different pattern in that the association between popularity and depressive symptoms was stronger for early adolescent girls than boys. The apparent discrepancy between their findings and those from the present study may be related to their use of a popularity measure that combined both perceived popularity and acceptance. Although these variables were highly correlated in their investigation, they have been found to represent distinct phenomena in other studies (e.g., Parkhurst & Hopmeyer, 1998).

The role of peer acceptance as a moderator of the association between victimization and depressed affect, which initially appeared to apply to the entire sample, was teased apart and found to only exist for boys. That is, victimized girls who were highly accepted by their peer group were not afforded any special protection from depressive symptoms as compared with victimized girls who were low on peer acceptance. Thus, it appears that being accepted by a larger number of peers offers boys, as compared to girls, more direct and corrective benefits in terms of reducing depressive symptoms.

The pattern of findings for mutual friendship was different from the pattern observed for acceptance. As expected, girls benefited more from this exclusive dyadic
experience than they did from larger group peer acceptance. While having a mutual
dfriend and being highly accepted by the peer group were associated with comparable
strength to lower depressed affect for girls, only mutual friendship served a corrective
function by dampening the association between victimization and depressed affect. In
terms of between sex comparisons, girls tended to gain more direct benefits from mutual
friendship than boys as indicated by the stronger association for girls between having a
mutual friend and lower depressed affect; the association was non-existent for boys. The
current study’s inclusion of other peer support measures in the same model may have allowed for the detection of a different pattern of associations for boys and girls (cf.
Hodges et al., 1999).

Sex differences in the moderating effect of mutual friendship in buffering
victimized early adolescents’ risk for depressed affect were only detected at trend level,
with the effect being significant for girls but not for boys. It is possible that this trend is
an early marker of an unfolding pattern of sex differences that may become more
apparent at a later developmental stage. It is also possible that sex is not the only factor
associated with the moderating effect of mutual friendship. While the premise that girls
would benefit from dyadic relationships more than boys was based on a vast literature
suggesting girls’ greater preference for this form of interaction as compared to boys (for a
review, see Rose & Rudolph, 2006), mutual friendship may itself be moderated by other
factors such as the quality of interactions that occur within a given dyad. Exclusive
mutual friendships undoubtedly contain a broad spectrum of interactions that vary in
degree of supportiveness, a claim that is corroborated by the finding in the present study
that friendship quality moderated risk for depressed affect independently of the effects of mutual friendship.

Another indicator of the quality of friendships that was not explicitly examined in the present investigation relates to how stable they remain over time. Indeed, evidence that friendships may be less stable for girls than for boys (Benenson & Christakos, 2003) suggests that the benefits that girls gain from mutual friendships by virtue of valuing them more may be somewhat offset by their lower stability. While speculative, it may be the case that the greater stability of boys’ friendships over time may be related to their greater interconnectedness (Benenson, 1990; Parker and Seal, 1996), suggesting that boy dyads are more securely embedded within the larger peer group than are girl dyads. Taking this interpretation a step further and linking it to the present findings, a possible reason for why mutual friendship did not account for any variance in depressed affect in boys after controlling for peer acceptance is that the larger male peer group serves as the critical medium within which close male friendships are formed and maintained. Longitudinal analyses that track the formation and stability of friendship networks within the larger peer group, as well as how the stability of mutual friendships moderates the association between interpersonal stress and maladjustment may lend further insight on this issue.

In contrast to the sex differences found for peer acceptance and mutual friendship in the current study, high quality friendships were found to be equally beneficial for victimized boys and girls. After controlling for the effects of the other peer support measures, friendship quality did not have a direct effect on depressed affect, but did make an independent contribution in buffering victimized boys and girls from depressed affect.
Thus, even though the benefits of peer acceptance and mutual friendship may have differed for boys and girls in accordance with sex-specific preferences for basic structural features of peer interactions, it appears that high quality friendships served a corrective function regardless of sex.

Supplementary analyses indicated that friendships that offered protective benefits were those that were high in positive provisions while also being low in negative features. In fact, the corrective effect of friendship quality only occurred when negative interactions were included in the analyses. That is, victimized early adolescents who perceived high levels of positive provisions in their best friend (such as support, intimacy, affection, reliable alliance, companionship, and nurturance) while also perceiving many negative interactions (such as conflict, antagonism, and criticism), were not protected from depressed affect. This finding is in line with Sullivan’s (1953) description of the type of best friendship that has the capacity to buffer interpersonal risk for maladjustment: an intimate exchange that allows for the validation of all aspects of personal worth.

One important goal of this study was to gather clues in the early adolescent social landscape that might explain why depression rates rise so sharply during middle adolescence, especially in girls (Avenevoli, et al., 2008). Overall, a model that combined the main and interactive effects of peer victimization with peer support measures accounted for greater variance in depressed affect in boys (51%) than in girls (32%). As there were no sex differences in the association between victimization and depressed affect, one may assume that this difference was rooted in the direct and corrective benefits of the peer support measures. That is, even though girls have been
conceptualized as having a greater relational orientation style than boys (Buhrmester, 1996; Cross & Madson, 1997; Helgeson, 1994; Maccoby, 1990), it appears that boys in this sample benefited more from peer support than did girls. As proposed earlier, despite the greater value that girls are assumed to place on dyadic relationships, these relationships may not always be reliable sources of support; they may be accompanied by negative tradeoffs that offset their ability to correct for negative interpersonal experiences such as peer victimization. Despite the finding from the present study that girls report higher mean levels of positive friendship provisions than do boys, there is evidence that girls' friendships tend to lack stability (Benenson & Christakos, 2003) and may become more stress-ridden as girls progress through adolescence (Forteza, Salgado-de-Snyder, Andrade, & Tapia, 1996; Rudolph, 2002). If a dyadic relationship is the form of support that early adolescent girls value, then the possibility that these relationships become less stable may help understand the greater female risk for depression during adolescence. Specifically, these relationships may not provide adequate social support to offset the risks associated with normative (e.g., puberty, school transitions) and non-normative (e.g., victimization) developmental challenges during the transition into adolescence. Continued exploration of the negative tradeoffs of girls' close friendships (e.g., Rose, 2002) as well as the functions of peer support during normative challenges such as school transitions is essential.

Yet another promising line of exploration could build on the finding that peer acceptance was the moderator that most clearly distinguished boys from girls. Future research could investigate the specific provisions that larger peer group acceptance offers boys in order to elucidate why boys responded more strongly to this form of support.
Baumeister and Sommer's (1997) conception of adult social styles suggests that while both males and females long for a sense of belongingness, men may favor a "broader social sphere" within which to satisfy this goal. It is possible then that acceptance from a larger number of peers offers a greater sense of belongingness to boys that might remedy the detriments related to other more difficult experiences with peers such as victimization. Research efforts may directly probe early adolescent boys and girls about their perceptions of the provisions of larger peer group interactions (e.g., belongingness, opportunities to develop close friendships). Importantly, although these processes may explain boys' protection from emotional maladjustment, they may function differently for behavioral problems with more externalizing characteristics (Rose & Rudolph, 2006). In any case, these research efforts may guide strategies for strengthening the moderating effect of peer acceptance for girls at risk for depression.

This study had several methodological strengths, beginning with a large sample of early adolescents from a community setting. Analyses carried out with advanced statistical tools were able to tease apart the effects of multiple peer support processes, allowing for the detection of their unique contribution in explaining variance in depressed affect. These peer support measures tapped into both dyadic and group level interactions and represented distinct phenomena, as suggested by the modest correlations among them.

Note that while shared method variance may have inflated correlations between certain variables (which should therefore be interpreted with caution), interpretations regarding the relative pattern of associations between one set of variables versus another were less affected by the choice of common respondents, namely peers. Although
multiple informants offer valuable perspectives of psychosocial problems during adolescence (Achenbach, McConaughy, & Howell, 1987), there are no clear guidelines on how to amalgamate cross-informant data, especially when there is low agreement between sources. Indeed, the modest agreement between self-reported and peer-reported victimization (Juvonen, Nishina, & Graham, 2001) and self-reported and peer-reported depression (Crowley, Worchel, & Ash, 1992) suggests that they represent distinct constructs. The methodological complexity of incorporating self-report data into the analyses of the present study would have exceeded the scope of this project. Had they been incorporated, it may have been necessary to explore additional factors (e.g., cognitive styles) to account for variance in depressed affect in children who perceive themselves as highly victimized but who are not perceived as victimized by their peer group. The decision to rely on peers to assess victimization and depressed affect was based on the assumption that a consensus among a group of natural observers (i.e., peers) may supply a reasonably accurate perception of a cyclical pattern of association between victimization and depressed affect. Peer perception was assumed to be especially accurate in identifying children who are at the upper extreme of either dimension, and for whom the conclusions of this study may be most applicable and important.

The interpretations of the present study are limited by its concurrent design, which did not allow for an exploration of the directional pattern of relationships among variables. However, the goal was not to identify causal mechanisms of depression (i.e., onset), but rather to look for factors that might underlie the presumably bidirectional relationship between interpersonal stress and depressive symptoms and to help understand how to reduce distress. Indeed, depression may best be conceptualized as both
an antecedent and as an outcome of stressful experiences (Hankin & Abramson, 2001), which is in line with its chronic and episodic pattern of symptom presentation (American Psychiatric Association, 2000). Nonetheless, a longitudinal examination that uncovers the unfolding of depressive symptoms over time in relation to victimization and peer support variables would be a valuable extension to the findings reported here. In addition to shedding light on directional patterns, such a design could also evaluate the importance of the stability of mutual friendships in moderating risk for depression.

Conclusions

Results from the present study elucidated the types of peer support that offer victimized early adolescent boys and girls the most protection from depressed affect. Findings were in line with observed and conceptualized sex differences in peer relationship styles suggesting that girls might benefit more from the dyadic structure of mutual friendships while boys might benefit more from being accepted by the larger peer group. High quality friendships, especially those characterized by low levels of negative features moderated victimized girls' and boys' risk for depressed affect above and beyond the benefits offered by mutual friendship and peer acceptance. Importantly, friendship quality functioned as an equally strong moderator for boys and girls suggesting that interventions that specifically target the reduction of negativity within friendships (e.g., conflict, criticism) may be beneficial to at-risk early adolescents regardless of sex. Such interventions may be especially important for girls because they are at greatest risk for depression during adolescence. A deeper exploration of the provisions of peer acceptance as well as the stability and tradeoffs of mutual friendships is recommended in order to increase the moderating effects of these peer support measures. As
aforementioned, the course of depression likely involves an interplay among multiple biopsychosocial factors. The current findings regarding the role of interpersonal factors within the early adolescent peer context contribute to the understanding of this complex mental health problem.
References


Dear Parent(s),

I am a professor at Concordia University, where I teach and do research on children and adolescents. One of the topics I study is how children's friendships, skills, and behaviors help them cope with daily hassles and stress in their lives. This topic is of interest to many parents, teachers, and health professionals. The purpose of this letter is to tell you about a study my students and I are conducting with fifth- and sixth-graders at your child’s school. This study will help us learn more about children and their development.

As part of the study, I will meet with the participating children in their school, and ask them to complete a set of questionnaires about themselves and their friends on two occasions, once in late January/early February, and again in late May. In these questions, the children will be asked to tell us (a) who they typically associate with in school, (b) whether or not the other participating children in the class have particular characteristics, (c) how much they engage in behaviors like helping or leading a group, (d) how well they perform in school and (e) how they feel about themselves. We will also ask the school to provide us with the children's report card grades for the current academic year. All the questionnaires will be completed at the child's desk in school and none of the other children will know how any other child has answered the questions. We ask the children to maintain the privacy of their answers and we make certain that their answers are kept confidential. A copy of this questionnaire is available at the school principal's office.

As a token of thanks, all participating children will receive a reward of $10.00 from the research team. In addition, we will be providing lectures to the students about mental health, and about ways to cope with the stressors they encounter in their daily lives.

We would also like you to complete a questionnaire for us. In it you will find some questions about your family's financial resources, your family environment, your child's behaviour and whether you take part in any "games" of chance such as buying lottery tickets. It should not take you more than 15 minutes to complete this questionnaire and we assure you that all your answers will remain completely confidential. We will send the questionnaire home with your son or daughter and you will return it to us via standard mail in a stamped and addressed envelope that we will provide. As a token of our appreciation, all families who participate in this part of the project will receive $20.00. Although we hope that as many families as possible will participate in this part of the project, children may still participate in the classroom part of the project even if their parents choose not to complete the family questionnaire. A copy of the questionnaire for families can be consulted at the school principal's office as well.

People who do research with children or adults are required to describe the risks and benefits related to participating in their studies. We assure you that this study poses no
risks, other than the risks children encounter in their day-to-day lives. It is not a treatment study; and it is not intended to provide direct benefits to the students who participate, though most children enjoy participating in such studies.

The information collected in this study will be completely confidential, and participation is entirely voluntary. Even if you give your child permission to participate, he/she is not required to take part; furthermore, you may change your mind at any time even if you already gave your permission.

This study has been approved by both the School Board and the Concordia University Human Research Ethics Committee. If at any time you have questions or concerns regarding your rights or your child's rights as research participants, please feel free to contact Adela Reid, Office of Research (Secretary to the Concordia University Human Research Ethics Committee) at (514) 848-2424 Ext. 4887.

If you have any other questions about the study, please call me at 848-2424 Ext. 2184 or send me a letter at: Department of Psychology, Concordia University, 7141 Sherbrooke Ouest, Montreal, QC, H4B 1R6. You can also email me at bukowsk@vax2.concordia.ca.

Please fill out the attached form and have your child return it to his/her teacher tomorrow.

As an incentive for the children to return the permission slip, any child who returns a slip, regardless of whether his/her parent has given permission for participating, will get a “twoonie” ($2.00).

Thank you for your help. We very much appreciate it.

Sincerely,

William M. Bukowski
Professor
Appendix B: Parental Consent Form
HEART, SOUL, MIND and BODY PROJECT

(GRADES 5 & 6)

WINTER 2006

PERMISSION SLIP

Please read and sign the following:

I understand that I am being asked if my daughter/son can take part in a research study conducted by Dr. W. M. Bukowski. I know that the purpose of the study is to examine how children's friendships, skills, and behaviors help them cope with daily hassles and stress in their lives. I know that if my daughter/son participates she/he will be asked to answer some questionnaires at his/her desk in the classroom. I have been told that the questionnaires are about the social relations of young people and how they think and feel about themselves and their friends. I know that my daughter/son does not have to participate in the study, and that even if she/he starts to take part in it, she/he can quit at any time. I also know that all answers will remain confidential and will NOT be shown to anyone. Only Dr. Bukowski and his assistants will know what is in the questionnaires.

Please check one of the following and ask your daughter/son to bring this permission slip into the homeroom class tomorrow.

___ My son/daughter has permission to take part in Dr. Bukowski’s study

___ My son/daughter DOES NOT have permission to take part in Dr. Bukowski’s study.

Parent’s Name: __________________________ PHONE: (___) __________________

Signature: ___________________________ DATE: ___________________________

Child’s Name: __________________________ CHILD’S SEX: Male Female
Appendix C: Child Consent Form
Name: ________________________________

☐ Boy  Age: ______  Grade: ______
☐ Girl

How many years have you been at this school? ______

(For example: Write "1" if this is your first year here.)

What is your postal code? ______ ______ ______

Please read and sign the following if you wish to participate in the study:

"I understand that I have been asked to be in a research study that Dr. W. M. Bukowski is doing about how young people feel about themselves and how they get along with others.

I know that I will be asked to answer some questionnaires in class. I know that I do not have to participate in the study, and that even if I start to take part in it, I can stop participating at any time. I also know that all answers will be kept confidential and will NOT be shown to anyone. Only Dr. Bukowski and his assistants will know my answers."

(SIGN) ________________________________  Date: ______-04-06

(day - month - year)

Please fill in the boxes completely: ■

and not like this  ★  ✔  ☐

If you make a mistake, cross out the incorrect box and fill in the correct one:

■ 1  2  3  4  5
Appendix D: Sociometric Nominations
First we would like to know who you are friends with and who you like to spend time with.

We want to know which boys and which girls are your friends.

In the box beside the name of the boy who is your best friend put a "1".
In the box beside the name of the boy who is your second best friend put a "2".
In the box beside the name of the boy who is your third best friend put a "3".
In the box beside the name of any other boys who are one of your friends put a "4".

Please only put one "1", one "2" and one "3", however you do not have to put a "2" or a "3".
Also, you can put a "4" beside as many names as you wish. Just be sure you think of the person as a friend.

Next, do the same for the names of the girls.

<table>
<thead>
<tr>
<th>Jimmy Hoffa</th>
<th>Cara Michelle Santo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clive Staples Lewis</td>
<td>Anna Karenina</td>
</tr>
<tr>
<td>Lev Vygotsky</td>
<td>Anna Freud</td>
</tr>
<tr>
<td>Kayser Soze</td>
<td>Jodie Foster</td>
</tr>
<tr>
<td>Marcus Aurelius</td>
<td>Michaela Joy Santo</td>
</tr>
<tr>
<td>Darth Vader</td>
<td>Virginia Wolf</td>
</tr>
<tr>
<td>William Bukowski</td>
<td>Holly Recchia</td>
</tr>
<tr>
<td>Jonathan Bruce Santo</td>
<td>Emma Bovary</td>
</tr>
<tr>
<td>Gordon Rosenoff</td>
<td>Brenda Milner</td>
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<tr>
<td>Harry Leroy</td>
<td>Jane Austen</td>
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<tr>
<td>Clark Kent</td>
<td>Juliet Capulet</td>
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<tr>
<td>Jean Piaget</td>
<td>Margaret Atwood</td>
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<tr>
<td>Harry Stack Sullivan</td>
<td>Nina Howe</td>
</tr>
<tr>
<td>Al Franken</td>
<td>Felicia Meyer</td>
</tr>
<tr>
<td>Luke Skywalker</td>
<td>Anne Rice</td>
</tr>
</tbody>
</table>
Appendix E: Peer Assessment
What are they like?

Instructions: Below there are several different characteristics. Each one describes a different way that a person could be or could act. After each characteristic there are the names of the students in your class. Fill in the box beside the name of any person who fits the characteristic.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Names</th>
</tr>
</thead>
</table>
### What are they like?

Fill in the box beside the name of any person who fits the characteristic.

**05. Someone who is liked by lots of people**

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holy Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Emma Bovary
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget

**06. Someone who would rather play alone than with others**

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holy Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Emma Bovary
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget

**07. Someone who worries a lot**

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holy Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Emma Bovary
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget

**08. Someone who hurts others physically**

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holy Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Emma Bovary
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget
<table>
<thead>
<tr>
<th>09. Others call him/her bad names</th>
<th>10. Someone who is unhappy</th>
<th>11. Someone who makes sure that everyone is treated equally</th>
<th>12. Someone who is lonely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kayser Soze</td>
<td>Kayser Soze</td>
<td>Kayser Soze</td>
<td>Kayser Soze</td>
</tr>
<tr>
<td>Jane Austen</td>
<td>Jane Austen</td>
<td>Jane Austen</td>
<td>Jane Austen</td>
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<tr>
<td>Al Franken</td>
<td>Al Franken</td>
<td>Al Franken</td>
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<td>Brenda Milner</td>
<td>Brenda Milner</td>
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<td>Brenda Milner</td>
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<td>Cara Michelle Santo</td>
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<td>Juliet Capulet</td>
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<td>Anna Freud</td>
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<tr>
<td>Lev Vygotsky</td>
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<tr>
<td>Felicia Meyer</td>
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<td>Felicia Meyer</td>
<td>Felicia Meyer</td>
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<tr>
<td>Jimmy Hoffa</td>
<td>Jimmy Hoffa</td>
<td>Jimmy Hoffa</td>
<td>Jimmy Hoffa</td>
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<td>Clark Kent</td>
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<td>Jodie Foster</td>
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<td>Harry Stack Sullivan</td>
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<td>Harry Stack Sullivan</td>
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<td>Holly Recchia</td>
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<td>Holly Recchia</td>
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<tr>
<td>Clive Staples Lewis</td>
<td>Clive Staples Lewis</td>
<td>Clive Staples Lewis</td>
<td>Clive Staples Lewis</td>
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<td>Anne Rice</td>
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<td>Emma Bovary</td>
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<tr>
<td>Harry Leroy</td>
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<td>Nina Howe</td>
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<tr>
<td>Jean Piaget</td>
<td>Jean Piaget</td>
<td>Jean Piaget</td>
<td>Jean Piaget</td>
</tr>
</tbody>
</table>

VGTC Study - Class Rating
### What are they like?

Fill in the box beside the name of any person who fits the characteristic.

#### 13. Someone who is by themselves because they prefer to be
- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Miner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holly Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Emma Bovary
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget

#### 14. Someone who has trouble making friends
- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Miner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holly Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Emma Bovary
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget

#### 15. Someone who is stuck up and thinks he/she is better than others
- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Miner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
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- Emma Bovary
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget

#### 16. Someone who is sad
- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Miner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holly Recchia
- Clive Staples Lewis
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- Luke Skywalker
- Emma Bovary
- Harry Leroy
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- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget
### What are they like?

Fill in the box beside the name of any person who fits the characteristic.

#### 17. Someone who prefers being by themselves

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
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- Harry Stack Sullivan
- Holly Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Emma Bovary
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget

#### 18. Someone who helps other people with their problems

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
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- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget

#### 19. Someone who is popular

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
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- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Emma Bovary
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget

#### 20. Someone who thinks they're better than they really are

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
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- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virginia Wolf
- Marcus Aurelius
- Margaret Atwood
- Anna Karenina
- Nina Howe
- Jean Piaget
### What are they like?

Fill in the box beside the name of any person who fits the characteristic.

**21. Someone who is nervous or tense**

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holly Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virgin Wolf
- Marcus Aurelius
- Anna Karenina
- Nina Howe
- Jean Piaget

**22. Others do mean things to him/her**

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holly Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virgin Wolf
- Marcus Aurelius
- Anna Karenina
- Nina Howe
- Jean Piaget

**23. Someone who gets stressed a lot**

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holly Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virgin Wolf
- Marcus Aurelius
- Anna Karenina
- Nina Howe
- Jean Piaget

**24. Someone who is left out by the other kids at school**

- Kayser Soze
- Michaela Joy Santo
- Jane Austen
- Al Franken
- Brenda Milner
- Cara Michelle Santo
- Juliet Capulet
- Anna Freud
- Lev Vygotsky
- Jonathan Bruce Santo
- Felicia Meyer
- Jimmy Hoffa
- Clark Kent
- Jodie Foster
- Harry Stack Sullivan
- Holly Recchia
- Clive Staples Lewis
- Anne Rice
- Luke Skywalker
- Harry Leroy
- William Bukowski
- Gordon Rosenoff
- Darth Vader
- Virgin Wolf
- Marcus Aurelius
- Anna Karenina
- Nina Howe
- Jean Piaget
What are they like?

Fill in the box beside the name of any person who fits the characteristic.

25. Someone who helps others when they need it

Kayser Soze ☐
Michelle Joy Santo ☐
Jane Austen ☐
Al Franken ☐
Brenda Milner ☐
Cara Michelle Santo ☐
Juliet Capulet ☐
Anna Freud ☐
Lev Vygotsky ☐
Jonathan Bruce Santo ☐
Felicia Meyer ☐
Jimmy Hoffa ☐
Clark Kent ☐
Jodie Foster ☐
Harry Stack Sullivan ☐
Holly Recchia ☐
Clive Staples Lewis ☐
Anne Rice ☐
Luke Skywalker ☐
Emma Bovary ☐
Harry Leroy ☐
William Bukowski ☐
Gordon Rosenoff ☐
Darth Vader ☐
Virginia Wolf ☐
Marcus Aurelius ☐
Margaret Atwood ☐
Anna Karenina ☐
Nina Howe ☐
Jean Piaget ☐

26. Someone who tries to keep others out of the group when it's time to play

Kayser Soze ☐
Michelle Joy Santo ☐
Jane Austen ☐
Al Franken ☐
Brenda Milner ☐
Cara Michelle Santo ☐
Juliet Capulet ☐
Anna Freud ☐
Lev Vygotsky ☐
Jonathan Bruce Santo ☐
Felicia Meyer ☐
Jimmy Hoffa ☐
Clark Kent ☐
Jodie Foster ☐
Harry Stack Sullivan ☐
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Clive Staples Lewis ☐
Anne Rice ☐
Luke Skywalker ☐
Emma Bovary ☐
Harry Leroy ☐
William Bukowski ☐
Gordon Rosenoff ☐
Darth Vader ☐
Virginia Wolf ☐
Marcus Aurelius ☐
Margaret Atwood ☐
Anna Karenina ☐
Nina Howe ☐
Jean Piaget ☐

27. Someone who always knows the right answer

Kayser Soze ☐
Michelle Joy Santo ☐
Jane Austen ☐
Al Franken ☐
Brenda Milner ☐
Cara Michelle Santo ☐
Juliet Capulet ☐
Anna Freud ☐
Lev Vygotsky ☐
Jonathan Bruce Santo ☐
Felicia Meyer ☐
Jimmy Hoffa ☐
Clark Kent ☐
Jodie Foster ☐
Harry Stack Sullivan ☐
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Harry Leroy ☐
William Bukowski ☐
Gordon Rosenoff ☐
Darth Vader ☐
Virginia Wolf ☐
Marcus Aurelius ☐
Margaret Atwood ☐
Anna Karenina ☐
Nina Howe ☐
Jean Piaget ☐
Appendix F: Network of Relationships Inventory
Family Composition

1. Who do you live with on a regular basis? (fill in all the boxes that apply)
   - Mother
   - Father
   - Stepmother
   - Stepfather
   - Sister(s)
   - Brother(s)
   - Stepsister(s)
   - Stepbrother(s)
   - Half-sister(s)
   - Half-brother(s)
   - Other (please specify): ____________________________

2. If you have siblings, what ages are they? (Write the number of siblings and the age of each sibling)

<table>
<thead>
<tr>
<th>Sister(s)</th>
<th>Brother(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of sisters:</td>
<td>Age(s):</td>
</tr>
<tr>
<td>Number of STEP-sisters:</td>
<td>Age(s):</td>
</tr>
<tr>
<td>Number of HALF-sisters:</td>
<td>Age(s):</td>
</tr>
<tr>
<td>Number of STEP-brothers:</td>
<td>Age(s):</td>
</tr>
<tr>
<td>Number of HALF-brothers:</td>
<td>Age(s):</td>
</tr>
</tbody>
</table>

3a. Are your parents separated or divorced?  □ No  □ Yes
   If you answered YES to 3a, please answer the following question. (Only write in the box that applies to you.)

3b. How often do you see your father (if you regularly live with your mother) and how much time do you spend with him? Example: I see my dad for a weekend every two weeks.

   ____________________________

How often do you see your mother (if you regularly live with your father) and how much time do you spend with her? Example: I see my mom for a weekend every two weeks.

   ____________________________

Now we are going to ask you some questions about how you get along with your mother, your father, one of your siblings and your best friend.

First, we would like you to identify the mother figure, the father figure, the sibling, and the friend about whom you will be answering the questions.

1. Fill in the box corresponding to the person who you will be describing as your mother. (If there is more than one, choose the one you think of as most important.)
   - Biological Mother
   - Adopted Mother
   - Step-Mother
   - Other (please specify): ____________________________
## Family Composition

2. Fill in the box corresponding to the person who you will be describing as your father. (If there is more than one, choose the one you think of as most important.)

- [ ] Biological Father
- [ ] Step-Father
- [ ] Adopted Father
- [ ] Other (please specify): __________

3. Please choose the brother or sister who is closest in age to you. (If you do not have a sibling, skip to question number 4.)

Your sibling is a: [ ] Boy [ ] Girl
How old is s/he? ___ years old

4. Please choose the most important friend you have in school now. Do not choose a sibling.

Your friend's name: First name: __________________ Last name: __________________
Your friend is a: [ ] Boy [ ] Girl
How old is s/he? ___ years old

Now we would like you to answer questions about the four people you have just chosen.

### PART 1

<table>
<thead>
<tr>
<th></th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
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<td>Mother</td>
<td>[ ] 1</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
</tr>
<tr>
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<td>[ ] 1</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
</tr>
<tr>
<td>Friend</td>
<td>[ ] 1</td>
<td>[ ] 3</td>
<td>[ ] 4</td>
</tr>
</tbody>
</table>

1. How often do you turn to this person for support with personal problems?

2. How often do you and this person get upset or mad at each other?

3. How often do you and this person get on each other's nerves?

4. How much do you talk about everything with this person?

5. How often does this person identify your weaknesses or put you down?

6. How often do you play and have fun with this person?
<table>
<thead>
<tr>
<th>Question</th>
<th>Mother</th>
<th>Father</th>
<th>Sibling</th>
<th>Friend</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. How much does this person punish you?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>8. How often do you count on this person for help, advice or comfort?</td>
<td>□</td>
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<tr>
<td>9. How often do you and this person disagree and argue?</td>
<td>□</td>
<td>□</td>
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<tr>
<td>10. How often do you and this person get annoyed with each other?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>11. How much do you share your secrets and private feelings with this person?</td>
<td>□</td>
<td>□</td>
<td>□</td>
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</tr>
<tr>
<td>12. How often does this person criticize you?</td>
<td>□</td>
<td>□</td>
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</tr>
<tr>
<td>13. How often do you go places and do enjoyable things with this person?</td>
<td>□</td>
<td>□</td>
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<tr>
<td>14. How much does this person discipline you for disobeying him/her?</td>
<td>□</td>
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<tr>
<td>15. When you are feeling sad or upset, how often do you count on this person to cheer you up?</td>
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</tbody>
</table>
16. How often do you and this person have arguments?

17. How much do you and this person hassle or nag one another?

18. How much do you talk to this person about things that you don't want others to know?

19. How often does this person say mean things to you?

20. How much does this person tell you that you are doing things you are not supposed to do?

**PART 2**

21. How much free time do you spend with this person?

22. How much does this person help you with things you can't do by yourself?

23. How much does this person like or love you?

24. How much do you like or love this person?

<table>
<thead>
<tr>
<th></th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Mother:</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Father:</strong></td>
<td>1</td>
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<td>3</td>
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<tr>
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<thead>
<tr>
<th></th>
<th>Little</th>
<th>Some</th>
<th>A lot</th>
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<tr>
<td><strong>Mother:</strong></td>
<td>1</td>
<td>2</td>
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<tr>
<td><strong>Friend:</strong></td>
<td>1</td>
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<td>3</td>
</tr>
</tbody>
</table>
25. How much does this person protect and look out for you?

26. How much does this person really care about you?

27. How much do you really care about this person?

28. How much does this person take care of you?

29. How much does this person have a strong feeling of affection (loving or liking) toward you?

30. How much do you have a strong feeling of affection (loving or liking) toward this person?

PART 3

31. How satisfied are you with your relationship with this person?

32. How sure are you that this relationship will last no matter what?

33. How good is your relationship with this person?
34. How sure are you that this relationship will last regardless of fights?

35. How happy are you with the way things are between you and this person?

36. How sure are you that this relationship will continue in the years to come?

<table>
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<tr>
<th></th>
<th>Not at all</th>
<th>Somewhat</th>
<th>Extremely</th>
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