

Parental Divorce and Depression in Adolescence: Investigating the Role of  
Positive Peer Relationships<sup>1</sup>

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### **Abstract**

This study examined the links among peer relationships, children's family status (e.g., children of divorce), and depression. Based on prior research, it was expected that adolescents who have an absent parent due to divorce but have close peer friendships would have lower rates of depression than adolescents with an absent parent without these close friendships. The study used a sample of 523 participants in Wave 3 (7<sup>th</sup> grade) of the 4-H Study of Positive Youth Development. Peer connection, but not family status, was related to depression scores. Among girls, but not boys, peer connection and family status moderated depression scores. For girls, higher peer connection was associated with lower depression scores for children experiencing no parental separation and other parental separations. However, higher peer connection was associated with higher depression scores for children experiencing parental divorce. Limitations of the research and implications for future research and application are discussed.

*Keywords:* peer connection, depression, divorce, adolescence

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## Parental Divorce and Depression in Adolescence: Investigating the Role of Positive Peer Relationships

Adolescence is a time of multiple biological, cognitive, and social changes. One problematic outcome that may arise during this time is depression (Graber & Sontag, 2009). Psychiatric disorders (e.g., depression, anxiety) increase in both incidence and prevalence during the adolescent years (Graber & Sontag, 2009). Mid-adolescence is the peak time of onset for major depression, and depression is the most commonly occurring disorder in adolescence (Compas & Reeslund, 2009; Graber & Sontag, 2009). Major depressive disorder (MDD), as described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), is characterized by depressed mood (in adolescents, the mood may be irritable rather than sad) or a loss of interest or pleasure, impaired daily functioning, and other symptoms for a period of at least two weeks (American Psychiatric Association, 2013). In addition, the American Psychiatric Association (2013) describes four risk factors for the development of depression, including neurotic temperament, environmental events (e.g., childhood family experiences, such as divorce), genetics, and comorbidity (i.e., having another psychiatric disorder). Depression is a highly recurrent disorder, with the adolescent onset of depression increasing the risk of subsequent depression in adulthood (Cicchetti & Rogosch, 2002; Compas & Reeslund, 2009).

In addition, gender differences in depressive disorders emerge at about Age 13 and increase throughout adolescence. The prevalence of MDD is twice as frequent in females as in males. Females have a higher rate of subclinical

symptoms as well (Galambos, Berenbaum, & McHale, 2009; Graber & Sontag, 2009). This disparity in prevalence between males and females for depressive symptomology suggests that, in order to optimize developmental outcomes for diverse youth, it is important to focus on gender differences.

Although adolescents with depression may experience similar symptoms (e.g., sadness, irritability, loss of interest or pleasure), each individual develops and reacts in different ways to these symptoms (Cicchetti & Rogosch, 2002). For example, as already noted, some children have preexisting characteristics that may be exacerbated during adolescence whereas, for others, psychopathology emerges during the adolescent years (Graber & Sontag, 2009). These differences indicate that there may be both continuity and discontinuity in the development of depression, which is one reason that adolescent depression should be studied from a relational perspective that rejects the split of continuity and discontinuity (Overton, 2015). Furthermore, some adolescents who exhibit resilience may experience traumatic events but will not react in negative ways and do not subsequently develop psychiatric disorders such as depression (Cicchetti & Rogosch, 2002). These disparate outcomes despite similar experiences, (i.e., multifinality) are not fully explained in psychiatry and psychology because the focus has mostly been on the individual rather than the mutually influential relations between individuals and contexts that may account for such variation in outcomes. It is important, therefore, to assess adolescent depression from a relational developmental systems perspective (Overton, 2015) in order to attempt

to better elucidate the individual-context relations that may moderate the multiple pathways that may be involved in different outcomes.

As also already noted, divorce is a contextual event that is a well-known challenge for the psychological well-being of children and adolescents (Amato & Sobolewski, 2001; Hoyt, Cowen, Pedro-Carroll, & Alpert-Gillis, 1990; Størksen, Røysamb, Holmen, & Tambs, 2006). More specifically, it has been found that young children of divorce have higher levels of anxiety and depression than children whose parents are in intact marriages (Hoyt et al., 1990). Going beyond the childhood years, there may be long-term negative effects on psychological well-being. For example, a study by Huurre, Junkkari and Aro (2006) found that females from divorced families (compared to non-divorced families) reported a higher rate of psychological problems, including higher scores on the Beck Depression inventory.

Time spent with peers increases significantly during adolescence, and peers become a significant influence in adolescent's belief systems, participation in activities, and interests (Brown & Larson, 2009). Peer relationships, specifically among females, become more intimate throughout the adolescent years (Brown & Larson, 2009). Among these relationships, the value of friends who stay loyal and committed throughout all types of interpersonal changes (e.g., romantic relationships, breakups, parental marital disruption) increases during the adolescent years (Brown & Larson, 2009). Furthermore, prosocial friends are found to have low levels of internalizing problem behaviors (Guroglu, van Lieshout, Haselager, & Scholte, 2007). The increased significance of the peer

context, coupled with preliminary evidence that friendship may positively impact mental health (e.g., diminishing internalizing behavior; Bukowski, Laursen, & Hoza, 2010), suggests the importance of studying friendships and depression, perhaps especially in relation to potential marital disruption due to divorce.

In short, there are many ways to combat or prevent the negative psychological effects of being a child of divorce. Because friendships have been shown to have positive effects for well-being, it is possible that they may be able to buffer youth against depressive symptoms that are associated with parental divorce.

### **Research Questions**

Accordingly, to explore the links between adolescent depression and divorce and friendships, this research addressed four questions, using data from a sample of youth who participated in the 4-H Study of Positive Youth Development (Lerner et al., 2005, 2011):

1. Are perceived friendship and peer relations related to depression? I hypothesized that, given that previous research has found that social support can buffer depression (Bukowski et al., 2010), higher ratings of perceived friendship and peer relations would predict lower rates of depression.
2. Is there a relation between divorce and depression in adolescents? I hypothesized that, because previous research has shown that there is an association between adolescents of divorced parents and having higher rates of depression (e.g., Storksen et al., 2006), adolescents who are children of divorce would have higher rates of depression than their peers who have not

had this experience.

3. Do friendships buffer against depression among adolescents who have an absent parent due to divorce? Here, I hypothesized that, because previous research has shown that there are associations between friendships and well-being, and an association between divorce and depression for the children of divorce, adolescents who had an absent parent due to divorce, but who had close friendships, would have lower rates of depression than adolescents with an absent parent without these close friendships.
4. Does gender play a role in the relation between friendship, depression, and divorce? Here, no directional hypothesis was formulated because there are mixed findings on the differences in friendships between males and females. Many studies have found that girls have closer and more intimate relationships (Brown & Larson, 2009). However, other studies have found that boys can have just as close or even more intimate relationships than girls (e.g., Way, 2011). Therefore, the relation between gender and these variables was assessed but without any prediction of gender differences.

## **Method**

### **Participants**

This study used data from participants in the 4-H Study of Positive Youth Development who were surveyed in Wave 3 (7<sup>th</sup> Grade). Complete details of the sampling and procedure for this study are found in several publications (e.g., Bowers et al., 2014; Lerner, et al., 2005, 2009, 2010, and 2011); only the details of the method relevant to the present study will be discussed here.



In Grade 7, 1,839 youth from 24 states were surveyed, along with 1,182 of their parents. In the present study, only participants whose parents completed a Parent Questionnaire as well as filled out the additional family status questions ( $N= 523$ ) were included in the analyses. These youth were 59.1% female, with a mean age of 13.05 years ( $SD = 0.61$ ). Self-reported race for these youth was: European American, 66.2%; Latino/a, 11.8%; African American, 7.7%; Multiracial, 4.6 %; Asian American, 2.7%; and American Indian, 1.8%. Socioeconomic status, as indexed by mother's highest educational attainment, was: Four-Year Degree, 24.1%; Trade School or Some College, 23.1%; High School Diploma, 22.2%; Two-Year Degree, 13.6%; Master's Degree, 7.8%; Doctorate or Professional Degree, 2.3%; Some High School, 2.1%; and Eighth Grade or Less, 1.7%. In regard to household composition, 13.7% of these participants were reported as living in a single-parent home.

## **Measures**

To address the links between friendship, mental health, and divorce, the present study used measures of peer connection, depression, and family status, respectively. In addition, gender of the participants was included in the analyses to explore gender differences.

**Peer Support Scale.** Four items adapted from the Inventory for Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987) used in the Teen Assessment Project (TAP) Survey Question Bank (Small & Rodgers, 1995), were used to assess adolescents' relationships with friends. Examples of items included "I trust my friends" and "My friends care about me." The response format ranged

from 1 = *always true* to 5 = *almost never true*. When all items are reverse coded, higher scores indicate higher peer support. In this data set, the Cronbach's alpha for the Peer Support Scale was .93.

**Depression.** The Center for Epidemiological Studies Depression (CES-D) scale is a widely used 20-item self-report measure of depressive symptomatology (Radloff, 1977). It was included in the 4-H Study as a measure of risk.

Depression was conceptualized as feelings of frustration, sadness, demoralization, loneliness, and pessimism about the future (Radloff, 1977). Examples of items include "During the past week I was bothered by things that usually don't bother me" and "During the past week I felt sad." The response format is on a 4-point scale, ranging from 0 = *rarely or none of the time (less than 1 day)* to 3 = *most or all of the time (5-7 days)* to indicate how frequently the respondent experienced symptoms during the past week (although the original scale asks about the experience of symptoms over the past two weeks). Items are summed for a total score, with a maximum score of 60; and higher scores are indicative of higher depressive symptomatology – greater frequency and number of symptoms of depression.

The scale has good reliability ( $\alpha = .85$ ; Radloff, 1977) and validity (e.g., the CES-D correlates significantly with other measures of mood states such as Profile of Mood States-Short Form and Bradburn Positive and Negative Affect Scale; Conerly, Baker, Dye, Douglas & Zabora, 2002; Radloff, 1977; Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977). The measure has been used extensively with adolescents, and such studies have established this scale's

validity and reliability with populations in high school and junior high school (Radloff, 1977). For example, Windle et al. (1986) demonstrated the construct validity of the measure with sixth graders. In the 4-H Study, scale reliability was high at all eight times of testing; that is, Cronbach's alphas ranged from .81 to .89 across Grades 5 through 12.

**Family Status: The Parent Questionnaire (PQ).** One parent/guardian per youth participant was asked to complete the parent questionnaire for each child participating in the study. The PQ was composed of three types of items, that is, 1. items about the parent/caregiver, the neighborhood, and the household; 2. items about the child; and 3. items about potential parent-child separations.

Family status (i.e., if there is long-term separation between the child and a parent) was used as a variable in the present analyses. Respondents were asked to indicate whether the child had experienced separation from one or both parents for more than one month between the years of 1999 and 2005 as a result of military deployment, a religious/spiritual/humanitarian mission, another job in a different location, separation or divorce, incarceration, illness, or any other reason. For analyses in the current study, family status was divided into three groups including: families who experienced divorce; families who experienced separation for reasons other than divorce; and families who did not experience any separation.

## **Procedure**

Teachers or program staff gave each child an envelope to take home to the parent or guardian. The envelope contained a letter explaining the study, two

consent forms (one that was returned to the school and one that could be kept for the records of the parent or guardian), a parent questionnaire, and a self-addressed stamped manila envelope for returning the parent questionnaire and consent form.

Adolescent data collection was conducted by trained study staff or assistants hired at more distant locations. A detailed protocol was used to ensure that data collection was administered uniformly and to ensure the return of all study materials. The procedure began with reading the instructions for the student questionnaire to the youth. Participants were instructed that they could skip any questions they did not wish to answer. A two-hour block of time was allotted for data collection, which included one or two short rest periods. Students who were unable to be surveyed at their school or 4-H site, either because they were absent during the day of testing or the school superintendent did not allow testing to occur in the school, received a survey in the mail.

## **Results**

The purpose of this study was to investigate whether there were relations among friendship (i.e., peer connection), family status, and depressive symptoms. I hypothesized that higher ratings of perceived friendship and peer relations would be related to lower scores of depression; adolescents whose parents had divorced would have higher scores of depression than their peers who had not had this experience; and, finally, that adolescents who had experienced divorce, but who had close friendships, would have lower depression scores than adolescents with an absent parent without these close friendships. Finally, due to diverse findings in the literature, I explored gender differences in peer relations, family

status, depressive symptoms, and the relations between these variables (see Table 1 for the means and standard deviations for these variables).

The hypothesis that higher ratings of perceived friendship and peer relations would covary with lower scores of depression was tested using correlational analysis. I found that peer connection was significantly and negatively related to depression ( $r(521) = -0.30, p < .001$ ), with lower peer connection scores associated with higher depression scores. Thus, the relation between depression scores and peer connection scores displayed a moderate effect size, based on criteria forwarded by Cohen and others (Cohen, 1988; Ferguson, 2009), that is, an  $r$  between 0.1 to 0.3 = moderate effect size.

I tested the hypothesis that adolescents who are children of divorce would have higher levels of depression than their peers who have not had this experience using a one-way, fixed effects ANOVA, with the between-subjects dimensions being family status. I found that family status (i.e., children who experienced parental divorce, children of families with other parental separation, and children of families with no parental separation) was not significantly related to depression scores [ $F(2, 401) = 2.54, p = .08$ .]

### **Multiple Regression Analysis**

Multiple regression was used to test the hypothesis that adolescents who have an absent parent due to divorce but have close friendships would have lower depression scores than adolescents with an absent parent without these close friendships. This analysis was done in several steps (see Table 2 to see each model along with the regression coefficients and p-values).

First, I conducted a regression using only peer connection and family status to predict depression scores. These predictors accounted for a statistically significant proportion of the variance in depressive symptoms ( $R^2 = .10, p = .001$ ). In the next model, I kept the prior two predictors but added two interaction terms: Peer Connection x No Separation, and Peer Connection x Other Separation. Taken together, these four predictors also accounted for a statistically significant proportion of the variance in depressive symptoms ( $R^2 = .11, p < .001$ ).

To address the question of gender differences in the relations between peer connection, family status, and depression scores, I used a multiple group model, with the two groups being boys and girls, to predict depression scores (see Table 3 for a summary of the results of these analyses). First, similar to the overall sample, I conducted a regression using only peer connection and family status to predict depression scores. These predictors accounted for a statistically significant proportion of the variance in depressive symptoms for both boys and girls (boys:  $R^2 = .14, p = .01$ ; girls:  $R^2 = .13, p = .002$ ). Again, similar to the overall model, in the next models I kept the first two predictors but added two interaction terms: Peer Connection x No Separation, and Peer Connection x Other Separation. These predictors accounted for a statistically significant proportion of the variance in depressive symptoms for both boys and girls (boys:  $R^2 = .15, p = .01$ ; girls:  $R^2 = .18, p < .001$ ).

In the “Boys” model that included interaction terms, only peer connection was a significant predictor of depressive symptoms. However, in the “Girls” model that included interaction terms, all variables except peer connection were

significant. To determine whether the coefficients were similar for boys and girls, I conducted a series of models in which sets of parameters were constrained to be equal across boys and girls. For each model with constraints, I compared the model's chi-square value to the chi-square value of the original unconstrained model to determine whether constraining the coefficients produced a significant decrease in model fit (which would indicate that the two coefficients were statistically significantly different). As shown in Table 4, the unconstrained model (in which regression coefficients were estimated freely within each group) provided the best fit to the data (Table 4 shows a summary of the model fit indices for each of these models). Therefore, I concluded that the coefficients were different across groups.

In sum, I found that peer connection was significantly and negatively related to depression, but that family status was not significantly related to depression scores. In addition, I found that the interaction of peer connection and family status was statistically significant for girls but not for boys. For boys, only peer connection accounted for a statistically significant proportion of the variance in depressive symptoms.

To aid in the interpretation of the significant coefficients of the interactions for girls, I graphed the relation between peer connection and depression scores for the three different family status groups (i.e., children who experienced parental divorce, children of families with other parental separation, and children of families with no parental separation). These relations are shown in Figure 1. As indicated in the figure, the no separation and other separation

groups show very similar patterns, with adolescents of the no separation family status showing slightly lower depression scores. In addition, whereas higher peer connection was associated with lower depression scores for female children of families with other separation and female children of families with no parental separation, higher peer connection was associated with higher depression scores for female children who experienced parental divorce.

### **Discussion**

The purpose of the present study was to examine the possible links among adolescent depression, parental divorce, and friendships in order to assess if peer connection buffered youth against depressive symptoms associated with parental divorce. It was hypothesized that higher scores of peer connection would be related to lower depression scores, and that adolescents who are children of divorce would have higher scores of depression than their peers who have not had this experience. In addition, it was hypothesized that adolescents who had an absent parent due to divorce, but who had close friendships, would have lower rates of depression than adolescents with an absent parent without these close friendships. Finally, whereas no directional hypothesis was made, I explored gender differences.

The results of a correlational analysis indicated that peer connection was significantly and negatively related to depression. The results of a one-way, fixed-effects ANOVA, with the between-subjects dimensions being family status, indicated that family status was not significantly related to depression scores. In addition, the results of multiple regression analyses indicated that the model



including peer connection and family status accounted for a statistically significant proportion of the variance in depressive symptoms among the entire group (boys and girls together). As was hypothesized, higher peer connection scores were associated with lower depression scores. In addition, children of families with no separation had lower depression scores compared to children from divorced families. Moreover, when the interactions (Peer Connection x No Separation, and Peer Connection x Other Separation) were added to the model, the four predictors, taken together, accounted for a statistically significant proportion of the variance in depression scores. However, in this model, no predictor alone accounted for a statistically significant proportion of the variance in depression scores.

When examining gender differences, I found that the interaction of peer connection and family status was statistically significant for girls but not for boys. For boys, only peer connection accounted for a statistically significant proportion of the variance in depressive symptoms. As hypothesized, higher peer connection scores were associated with lower depression scores for boys. However, family status as well as the interactions between peer connection and family status did not account for a statistically significant proportion of the variance in depressive symptoms.

For girls, in the model including the interactions, peer connection on its own did not account for a statistically significant proportion of the variance in depression scores. However, there were main effects for the other predictors. For these girls, I found that, whereas higher peer connection was associated with

lower depression scores for female children of families with other separation and female children of families with no parental separation, higher peer connection was associated with higher depression scores for female children who experienced parental divorce.

For children of families with other separation and no parental separation, these findings were consistent with my hypothesis and previous literature. However, for girls who have experienced parental divorce, the finding that higher peer connection was actually associated with higher depression scores was not expected. Although not measured in this study, I speculate that one possible explanation for this finding is the phenomenon of co-rumination. Although friendships can act as a buffer against depression (Bukowski et al., 2010), it is also possible that close friendships may actually lead to increases in depressive symptoms (Rose, Carlson, & Waller; 2007). Co-rumination, defined as “excessively discussing personal problems within a dyadic relationship...characterized by frequently discussing problems, discussing the same problem repeatedly, mutual encouragement of discussing problems, speculating about problems, and focusing on negative feelings” (Rose, 2002), may lead to increased depression in female children who have experienced divorce. Two close friends may incessantly discuss the divorce that has occurred which may lead to a consistent negative focus on problematic topics, as well as less time spent in more positive activities (Rose et al., 2007). There may be selection effects in relation to co-rumination. That is, adolescents may seek out friends with whom they can co-ruminate (e.g., peers who are also going through

difficult transitions, such as family status changes). Further research will need to measure co-rumination as well as assess peer networks and possible selection effects.

Co-rumination is not the only phenomenon that may pertain to the potential negative effects of peers on mental health and well-being. For example, Antonucci, Akiyama, and Lansford (1998) found that women were less happy the more close relationships they had, and that having more people with whom women feel close is not always advantageous. In addition, folie à deux (FAD) is a rare mental disorder characterized by the presence of the same psychiatric symptoms in two people who are in close relation (Teixeira, Mota, & Fernandes, 2013). FAD, thought of as a “shared psychotic disorder,” in which one individual “induces” the other individual into exhibiting psychiatric symptomology, is then another instance where close relationships may actually negatively affect mental health (Teixeira et al., 2013).

However, another explanation may be that the peer connection measure I used was not optimal. It is possible that specific types of peer connection and friendships may be different for different people (e.g., adolescents of different family statuses), which may affect the relation between peer connection and mental health. Further research should provide more nuanced assessment of peer connection. In turn, dividing family status into three different groups may reflect the structure of a family but not the actual relationships among family members. The measurement model I used was not able to identify if the adolescents in these families had relationships with their absent parents. Such relationships may have

impacted the relation of peer connection and depression scores differentially for the three family status groups. Moreover, measuring family status may not reflect the conflict within a family. It is possible that the amount of conflict present within a family accounts for differences in depression scores independent of family structure. Future research will be needed to address these possibilities. Furthermore, the timing of the divorce may impact depression scores among adolescents (e.g., Ge, Natsuaki, & Conger, 2006; Hetherington, 1979; Hetherington & Stanley-Hagan, 1999). The family status measure used in this study did not account for when a child-parent separation took place. Again, future research should account for the timing of these separations.

### **Limitations**

Although this study serves as a useful step in contributing to the understanding of peer connection, parent separation, and depression in adolescence, the study had several important limitations. For instance, in regard to external validity, the sample used in this study had more females than males, and the participants were primarily European American adolescents from higher SES families. Therefore, the results may not generalize to other populations. In addition, the sample consisted of only adolescents in seventh grade and therefore may not generalize to other portions of adolescence. In addition, only participants whose parents completed a Parent Questionnaire and filled out the additional family status questions were included in the analyses. The selection effects of this sample are therefore not random. Adolescents whose parents were willing and able to fill out each part of questionnaire about family status may significantly

differ from adolescents whose parents were not willing to do the same. Although this study was interested in the effects of parents, it is possible that the results obtained were skewed due to parents who were not involved and willing to participate in the study. Similarly, people who agree to participate in research studies may not be representative of the overall population and therefore this bias may have consequences for the external validity of the results of this study (Baltes, Reese, & Nesselroade, 1977). Therefore, the results of this study must be generalized with caution.

Moreover, survey research may not be the best way to index peer connection. Certainly, it is not the only way to measure this construct. Therefore, future research should triangulate measures across different methods. Another limitation of this study is that participants were only from one wave of data collection and therefore the study was not longitudinal in design. Therefore, interpretations cannot be made in regard to developmental changes that may occur among parental separation, peer connection, and depression.

In addition, this study did not measure many factors that may play a role in the relations among family status, peer connection, and depression. For example, peer delinquent behavior (and peer pressure) may be related to depression, peer connection, and other social outcomes, such as isolation and popularity. Future research should measure peer delinquent behavior to address this possibility. Out of school time (OST) activities may also impact the relations among depression, peer connection, and family status. Therefore, future research should seek to understand the extent to which peer involvement in OST activities,

that afford access to other peer networks, may be a moderator variable for depression and peer connection. In addition, future research should also seek to understand if involvement in these OST activities and access to these OST-based peer groups might fill the void that may be caused by parental absence. Finally, other transitions in the lives of these adolescents, in addition to just family status changes, may influence depression scores. Examples are transitions to new communities or schools (e.g., Barber & Olsen, 2004; Rudolph, Lambert, Clark & Kurlakowsky, 2001). In addition, non-normative events (e.g., hurricanes or earthquakes), parental separation due to military deployment, or parental death may influence youth depression (e.g., Brent, Melhem, Donohoe, & Walker, 2009; Lester et al., 2010; Pina et al., 2008). Therefore, future research may consider a broader assessment of both the individual and the context including school transitions, puberty, and peer network changes in relation to depression.

In sum, future research should use more diverse and representative samples in order to enable greater generalizability of findings. Moreover, future research should seek to gain higher parent participation in order to increase interpretations of findings. In addition, future research should study this phenomenon of the relation between peer connection and family status on depression longitudinally and use statistics that account for intraindividual change to capture the differences of these relations between and within people. Furthermore, future research may consider using triangulated measures.

## Conclusions

Despite its limitations, the present study does further the understanding of the links among peer connection, family status, and depression among adolescents. For boys and girls, it was found that peer connection in some way (either on its own for boys, or interacting with family status, for girls) accounted for a statistically significant proportion of the variance in depression. What is important about this finding is that friends matter.

The results of this study have implications for both future research and practice. It may be important to integrate peers into interventions for adolescents experiencing depression or prevention programs for children and adolescents experiencing parental separation. Peer mentoring is one such program that has the potential to serve as a very impactful positive youth development program and, by promoting peer connection, perhaps act as a preventative factor in regard to negative mental health outcomes (Karcher, Davidson, Rhodes & Herrera, 2010). However, peer mentoring may also have iatrogenic effects (Karcher et al., 2010). Therefore, it will be important for peer mentoring and other peer intervention and prevention programs to emphasize structure, training, monitoring, and a strengths-based approach (Rhodes & Lowe, 2009). In addition, it will be important to consider and focus on the gender differences of peer connection in relation to depression. Whereas it may be sufficient to help boys make close friends, for girls, it may be necessary to investigate what is going on in these peer relationships in order to understand if these friendships may lead to positive or negative mental health outcomes.

In short, important questions still exist about the interplay among peer relations, family status, and depression among adolescents (especially girls). Nevertheless, this study serves as a useful step in exploring this relation and provides ideas for future studies of these relations.



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Table 1

*Means and standard deviations, for depression scores and peer connection in Girls (N = 253) and Boys (N = 172).*

Measures	Mean	SD
All Girls		
Depression Score	13.24	9.75
Peer Connection	10.21	1.98
All Boys		
Depression Score	11.81	9.21
Peer Connection	8.71	2.54
Girls in Families of Divorce		
Depression Score	14.25	9.15
Peer Connection	10.42	1.86
Girls in Families of Other Separation		
Depression Score	14.82	9.73
Peer Connection	9.86	2.43
Girls in Families of No Separation		
Depression Score	12.46	9.95
Peer Connection	10.21	1.90

## Boys in Families of Divorce

Depression Score	14.07	11.06
Peer Connection	8.79	2.35

## Boys in Families of Other Separation

Depression Score	12.48	9.98
Peer Connection	8.16	3.05

## Boys in Families of No Separation

Depression Score	10.78	8.11
Peer Connection	8.90	2.38

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Table 2

*Summary of Full Group Regression Models Predicting Depression Symptoms (N = 523)*

Variable	$R^2$	$p$	$B$	$SE B$	$\beta$	$p$
Model 1	.10	.001				
Intercept			26.00	2.20	2.72	<.001
Peer Connection			-1.20	0.20	-0.29	<.001
No Separation v. Divorce			-2.53	1.13	-0.13	0.03
Other Separation v. Divorce			-1.36	1.45	-0.06	0.35
Model 2	.11	<.001				
Intercept			18.86	4.58	1.98	<.001
Peer Connection			-0.48	0.46	-0.12	0.30
No Separation v. Divorce			5.79	5.32	0.30	0.28
Other Separation v. Divorce			8.42	5.88	0.34	0.15
Peer Connection x No Separation			-0.85	0.53	-0.45	0.11
Peer Connection x Other Separation			-1.02	0.60	-0.39	0.09

Table 3

*Summary of Multiple Group Regression Models Predicting Depression Scores for Boys (N = 172) and Girls (N = 253)*

Variable	$R^2$	$p$	$B$	$SE B$	$\beta$	$p$
Model 1 Boys	.14	.01				
Intercept			24.47	2.94	2.64	<.001
Peer Connection			-1.17	0.28	-0.35	<.001
No Separation v. Divorce			-3.29	1.77	-0.18	0.06
Other Separation v. Divorce			-2.37	2.15	-0.11	0.27
Model 1 Girls	.13	.002				
Intercept			31.86	3.35	3.27	<.001
Peer Connection			-1.70	0.30	-0.35	<.001
No Separation v. Divorce			-2.10	1.42	-0.11	0.139
Other Separation v. Divorce			-0.34	1.91	-0.01	0.859
Model 2 Boys	.15	.01				
Intercept			28.76	6.23	3.12	<.001
Peer Connection			-1.66	0.69	-0.49	0.02
No Separation v. Divorce			-9.73	7.20	-0.52	0.18
Other Separation v. Divorce			-5.38	7.66	-0.24	0.48
Peer Connection x No Separation			0.73	0.79	0.38	0.36
Peer Connection x Other Separation			0.33	0.86	0.13	0.70
Model 2 Girls	.18	<.001				
Intercept			10.05	6.79	1.03	0.14
Peer Connection			0.40	0.64	0.08	0.53
No Separation v. Divorce			24.94	7.90	1.25	0.002
Other Separation v. Divorce			28.02	9.26	1.05	0.002
Peer Connection x No Separation			-2.61	0.75	-1.39	0.001
Peer Connection x Other Separation			-2.76	0.89	-1.05	0.002

Table 4

*Model Fit Indices for Multiple-Group Models (N = 380)*

	$\chi^2$	<i>df</i>	<i>p</i>	$\Delta\chi^2$	$\Delta df$	<i>p</i>
Model 1: Unconstrained	0	0	0	-	-	-
Model 2: Peer Connection Equality Constraint	4.85	1	0.03	4.85	1	0.03
Model 3: Peer Connection and Family Status Equality Constraint	13.85	3	0.003	13.85	3	0.003
Model 4: Peer Connection and Interactions Equality Constraint	11.85	3	0.008	11.85	3	0.008

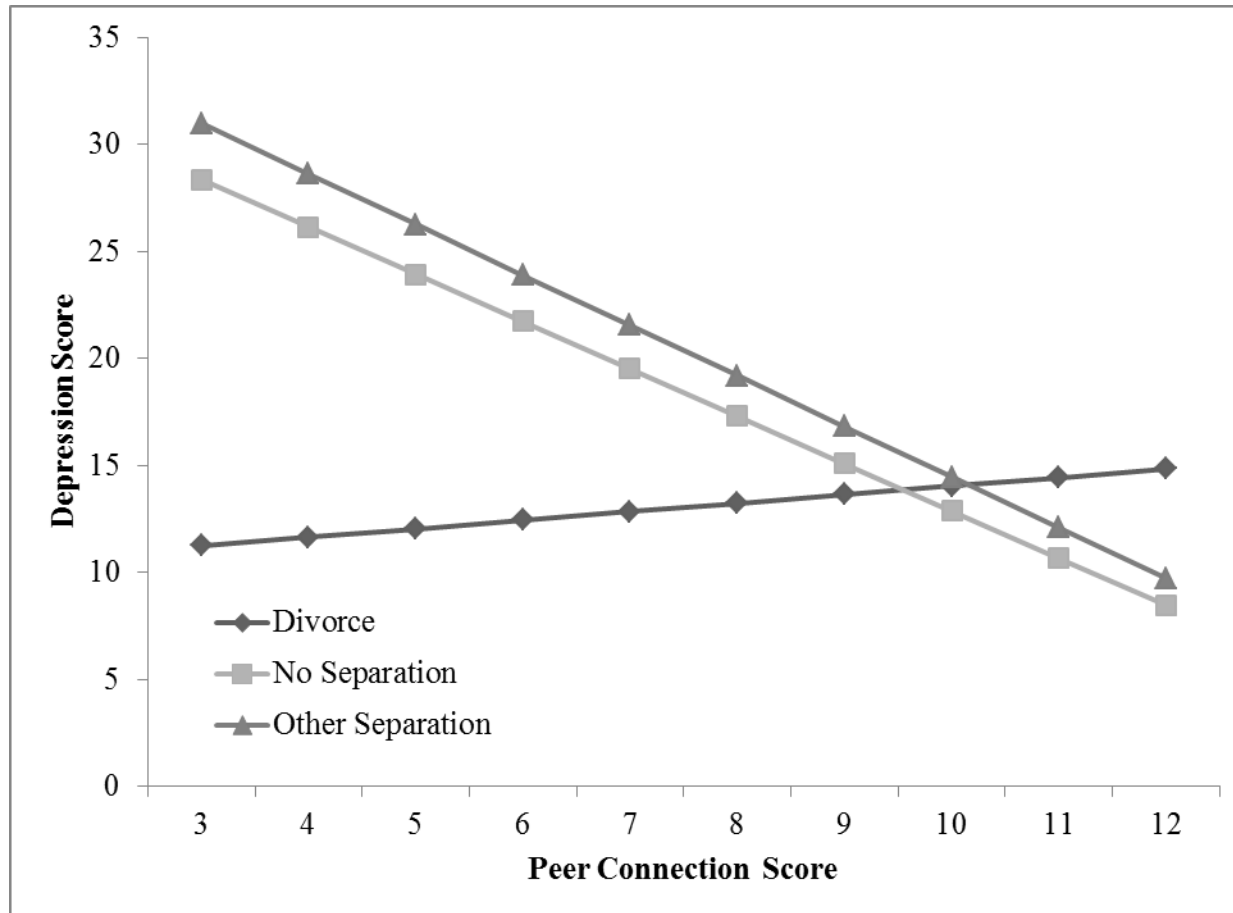


Figure 1. Relation for Girls Between Peer Connection and Depression Scores for Three Family Statuses