Published in final edited form as:
Int J Offender Ther Comp Criminol. 2011 October ; 55(7): 1096–1109. doi:10.1177/0306624X10382637.

Gender, Social Support, and Depression in Criminal Justice Involved Adolescents

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Abstract

Knowing where criminal justice involved teens look for support and whether those supports reduce depression has important and possibly gender-specific treatment implications for this vulnerable population. This study examines the relationships between social support and depression in a mixed-gender sample of 198 incarcerated adolescents. Greater support from families and overall and greater satisfaction with supports predicted lower depression for boys and girls. Support from siblings and extended family strongly predicted lower depression; support from parents and from friends was either not related or only weakly related to depression. Girls reported higher levels of depression, more support from friends and extended family, and less support from parents than did boys. Family, sibling, and overall support were stronger predictors of depression for girls than for boys. Results suggest that non-parent family members, especially siblings and extended family, provide important emotional resources for teens in the criminal justice system.

Keywords

juvenile delinquency; adolescence; gender differences; social support; depression

Adolescents involved in the juvenile justice system experience disproportionately high rates of depressive symptoms and are more likely to meet diagnostic criteria for a mood disorder than community-based youths (Domalanta, Risser, Roberts, & Risser, 2003; Pliszka, Sherman, Barrow, & Irick, 2000; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). Moreover, adolescents in juvenile justice residential facilities face a tripled risk of death by suicide (Gallagher & Dobrin, 2006). While substantial research efforts have advanced our understanding of disruptive behavior disorders among incarcerated youths, far less is known about the factors associated with depression and other internalizing symptoms in this population.

Considerable cross-sectional and prospective research indicates that perceived social support protects against depression among youth in the community (Kobak, Sudler, & Gamble, 1991; Patten, Gillin, Farkas, Gilpin, Berry, Pierce, 1997). Although the mechanism by which social support exerts its benefit is not fully known, one hypothesis is that social support

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buffers the effects of stressful life events on mood (e.g. DuBois, Felner, Brand, Adan, & Evans, 1992; Malecki & Demaray, 2006). For example, modern attachment theory "emphasizes the importance of seeking and receiving love and support in times of need and stress,… which characterizes social support as an innate form of amelioration and protection from physical and psychological pain" (Mikulincer & Shaver, 2008, p. 167). Evidence indicates that perceived social support can function as a pain-buffering mechanism, promoting increased self-efficacy and optimism as well as reduced loneliness in the face of stress (Mikulincer & Shaver; Southwick et al., 2005). In contrast, low social support may heighten vulnerability to the negative impact of stress, thereby creating increased risk for depressed mood.

Despite considerable empirical attention afforded to the influence of social support on depressive symptoms among community-based youth (cf Bal, Crombez, & Oost, 2003; Garnefski, 2000), few studies have examined the effects of social support networks on depressive symptoms among the nearly 93,000 youth detained in the United States criminal justice system on any given day (Sickmund, Sladky, Kang, & Puzzanchera, 2008). Research on the social networks of criminal-justice involved youth typically focuses on delineating the links between parent or peer variables and the development of *externalizing symptoms* such as antisocial and disruptive behavior. As a consequence, little is known about how social support affects depression and other *internalizing symptoms* among these youths. Moreover, social support variables that play a large role in the development of antisocial behavior may not contribute to the development of depressive symptoms. For example, many studies (c.f. Moffitt, Caspi, Rutter, & Silva, 2001) show that having antisocial peers increases risk for substance use disorder and antisocial personality disorder. However, it is possible that having *any* peers, even antisocial ones, may protect against depression.

Although limited, studies of criminal justice involved youth seem to indicate that low social support is associated with more depression in this population. For example, an early study found that incarcerated young men who had depression reported less perceived practical support from their mothers and emotional support from their peers than did their non-depressed counterparts (Biggam & Power, 1997). Morgan and Hawton (2004) found that poor peer relationships were associated with deliberate self-harm among incarcerated boys. More recently, McCarty, Vander Stoep, and Kuo (2006) found that incarcerated teens who reported less caregiver support reported more depression. These studies, though illustrative of the effects of perceived social support on depression symptoms among incarcerated adolescents, have almost exclusively studied boys and have generally only measured a single source of social support.

These omissions in the criminal justice literature are concerning because the effects of social support on depression have been found to vary by both source of support and gender in community studies. For example, one large epidemiological study (Garnefski, 2000) found that negative perceptions of family support were strongly associated with depressive symptoms and that negative perceptions of peer support had a smaller, but still significant, association with depression. Similarly, a longitudinal study of adolescent girls (Stice, Ragan, & Randall, 2004) found that deficits in parental support but not peer support predicted future increases in depressive symptoms and the onset of major depressive disorder. A final study found that parent support was protective against depression, but that peer support was strongly associated with social self-efficacy (McFarlane, Bellissimo, & Norman, 1995). Despite evidence of parents' strong impact on depressive symptoms, adolescents report same-sex peers as their most important source of companionship and intimacy, followed by mothers, and then siblings, fathers, and significant others (Buhrmester & Furman, 1987; Furman & Buhrmester, 1992).

Sex of the adolescent also influences the association between perceived social support and depressive symptoms in community studies. In general, the association between poor social support and distress is stronger for girls and than for boys (Landman-Peeters, Hartman, & van der Pompe, 2005), with interpersonal stress more strongly associated with emotional difficulties for girls than for boys (Rose & Rudolph, 2006). Likewise, good peer and parent relationships tend to be more protective against the onset of major depressive episodes for girls than boys (Leadbeater, Kuperminc, Blatt, & Hertzog, 1999). Furthermore, girls and boys often report different levels of social support from different sources (e.g., Chapman, 2003), with girls reporting higher levels of peer support (Kerr, Pruess, & King, 2006) and less family support (Buhrmester & Furman, 1987; Colarossi & Eccles, 2003). Overall, girls seek support in response to stress more than boys (Rose & Rudolph), and when support it is not available, it may lead to more psychological distress for girls relative to boys.

Gender also seems to influence both social support and depression among community based samples of youth with antisocial behavior. According to a large, longitudinal study that examined gender differences in antisocial behavior from early adolescence through adulthood, females in general have more peers overall, fewer delinquent peers, and report greater attachment to their peers than males (Moffitt, Caspi, Rutter, & Silva, 2001). This difference in peer groups accounts for much of the gender difference in rates of antisocial behavior. Females who do display antisocial behavior seem particularly troubled: they report more depressive symptoms, higher rates of depressive disorder, more social distress, and higher rates of relationship disruption (especially with parents) than do antisocial boys and non-antisocial girls (Moffitt et al.). Furthermore, the magnitude of the differences in depression and parental relationship quality between antisocial and non-antisocial youth is larger for girls than it is for boys (Moffitt et al.). Thus, community-based research suggests that incarcerated females may be especially vulnerable to depression and this may be related to social network disruption.

Because youth involved in the juvenile justice system are at a high risk of depression, because social network disruption may accompany incarceration, and because existing studies of juvenile justice involved youth have not considered important factors such as source of support and gender of the adolescent, a more comprehensive understanding of the relation between the social support systems of juvenile justice involved youth and depressive symptoms is needed. Such information could also inform whether existing empirically validated intervention used for adolescent depression, such as Interpersonal Therapy for Depressed Adolescents (IPT; Mufson, Dorta, Moreau, & Weissman, 2004) or family-based Cognitive-Behavior Therapy (CBT) protocols, may require adaptation for juvenile justice involved youth. For example, in this population, interpersonal relationships with parents are often troubled and peer relationships may have a positive effect on depression but a negative effect on antisocial behavior. Determining who these vulnerable teens depend on when they are distressed is important because these people may represent powerful resources in their treatment.

The purpose of the present study was threefold. The first goal of this study was to compare incarcerated boys and girls on measures of depression and sources of support. Because girls with conduct disorder tend to be more depressed and have more troubled relationships with parents than other youth (Moffitt et al., 2001) and girls in general are more reliant on peers than are boys (Rose & Rudolph, 2006; Kerr et al. 2006), we predicted that girls in the criminal justice system would report more depression, more peer support, and less parental support than would boys (Hypothesis 1). The second goal was to examine the effects of different sources of social support on depression among youth in the criminal justice system. We expected that greater perceived social support from any source would be associated with lower depression for both girls and boys (Hypothesis 2). The third goal, integrating the prior

hypotheses, was to examine gender differences in the relation between amount of perceived support and depression among youth in the criminal justice system. We predicted that higher social support would serve as a greater buffer against depression for girls than for boys (Hypothesis 3).

Method

Participants

This study used archival data from Esposito and Clum (2002) that was collected in 1996–1997. Two hundred and thirteen adolescents (ages 12–18) incarcerated at one of three juvenile detention centers were asked to participate in the study on a voluntary basis. All juveniles in residence at the detention centers on the days the study was conducted were recruited. Thirteen adolescents declined to participate and 3 were unable to read. Seven additional assessment packets could not be used because of incomplete data. The final sample included 198 participants: 139 male adolescents and 59 female adolescents. The participants ranged in age from 12 to 18 years old, with a mean age of 15.7 years. The sample was 65%White, 27% African American, and 7% other ethnicities (Hispanic, Asian/Pacific, Indian). Adolescents were incarcerated in the detention centers for a variety of offenses ranging from misdemeanors to capital offenses, including running away from home, delinquency, breaking and entering, burglary, arson, drug use and distribution, assault, rape, and murder. The adolescents in this study had spent a median of 6 days (range 1 – 420 days; mean = 12.9; SD = 33.7) in the detention center at the time of the assessment. Participants included both newly detained and sentenced adolescents.

Measures

Children's Depression Inventory (CDI; Kovacs, 1980; Kovacs, 1981; Kovacs, 1992)—The CDI is a 27-item self-report instrument designed to assess for depressive symptoms in children and adolescents aged 7 to 17. Symptoms measured include disturbed mood, anhedonia, vegetative functions, self-evaluation, and interpersonal behavior. Items are scored from 0 (absence of a symptom) to 2 (definite symptom), with possible total scores ranging from 0 to 54. Higher scores reflect more depressive symptoms (Kovacs, 1992). The CDI has been found to have acceptable internal consistency in normal (Saylor, Finch, Spirito, & Bennett, 1984; Smucker, Craighead, Craighead, & Green, 1986) and psychiatric (Saylor et al.) child and adolescent populations. The internal consistency of the CDI in this study was .86.

Social Support Questionnaire 6 (SSQ-6; Saranson, Saranson, Shearin, & Pierce, 1986)—The SSQ-6 is a shortened version of the SSQ (Saranson, Levine, Basham, & Saranson, 1983) that contains 27 items. The SSQ-6 asks participants to list up to nine people that they can rely on in six given sets of circumstances (e.g., "Who can you really count on to be dependable when you need help?", "Who accepts you totally, including both your worst and your best points?"). For each question, participants also rate how satisfied they are with these social supports, using a 6-point Likert-type rating scale. Scores on the Number scale range from 0 to 54, with a score of 0–9 possible on each of six items. Scores on the Satisfaction scale range from 0 to 30, with a score of 0–5 possible on each of six items.

For this study, people listed under each item were coded as "mother/s" (including step- and foster-mothers), "father/s" (including step- and foster-fathers), "sibling/s" (including step- and foster-siblings), "extended family," "friends," and "romantic friends." Y/N variables were created for each of these categories indicating whether anyone from the category was mentioned for any of the 6 items. Continuous variables were also created for each of these

categories, which counted the number of times a person from each category was listed on the questionnaire. Because it is possible to list several people from a single category (e.g., friends) on each question, the continuous variables potentially ranged from 0 to 54. Finally, total family number scores were created by adding the continuous scores from each family relationship category; total friend number scores were created by adding the continuous friend and romantic friend scores. Overall number scores combined all categories plus anyone else the adolescent listed. Because the SSQ items are open-ended rather than closed-ended, it is not possible to tell whether an adolescent failed to mention someone like a father or sibling because the adolescent does not have one or because that person is not perceived as supportive. For the purposes of the SSQ, it is who the adolescent perceives as supportive rather than why a particular support person may be lacking that is important.

The SSQ-6 has been shown to correlate significantly with the SSQ, and is internally consistent across both the Number and Satisfaction scales with high test-retest reliability in college students (Saranson et al., 1983). It has also been used with child and adolescent inner city populations yielding high internal consistency estimates for the Number and Satisfaction scales (Cunningham, 1995). The SSQ-6 yielded acceptable internal consistency estimates on the Number (.91) and Satisfaction (.86) scales in this study. None of the SSQ subscales or depression measures used in this study was significantly associated with age or race.

Procedure

Permission to conduct the study was obtained from the superintendents at each of three Juvenile Detention Centers in Virginia. The superintendents are permitted to grant this permission under the “in loco parentis clause” in the state of Virginia in accordance with the Code of Federal Regulation (CRF), 46.402. Juvenile advocates were also appointed to ensure that the rights of the incarcerated populations were not violated. The superintendents and juvenile advocates were required to read and sign consent forms and the adolescents to sign assent forms before assessment packets could be distributed. The assessment was conducted in groups of 8–10 youth in classrooms at the detention facilities. If at any point a participant decided to withdraw from the study, his/her assessment packet and assent form would have been collected and destroyed; however, none withdrew from the one-time 90–120 assessment process. No incentives were provided for participation other than snacks during the assessment. Upon completion of the assessment packets, participants were encouraged to talk to the staff at their respective facilities if they were feeling sad or upset; however, no adolescent appeared sad or upset upon completion of the study.

Results

Hypothesis 1: Comparison of boys and girls on depression and sources of support

Several variables were skewed and needed to be transformed to achieve normality. Days incarcerated was log-transformed. Mother, father, sibling, extended family, non-romantic friend, total friend, and total family number scores were also log-transformed. The satisfaction with supports scale was reversed and then natural-log transformed.

After ensuring normality and checking for outliers, we used general linear modeling and logistic regression analyses to test the hypotheses that girls in the criminal justice system would report more depression, more peer support, and less support from fathers and mothers than would boys. Since the boys were slightly older than the girls in our sample (15.8 vs. 15.3 years; $t = 2.3$, $p = .02$), we included age as a covariate in analyses comparing the genders. Because length of incarceration could affect adolescents’ support systems, we also included the log of the number of days participants had been incarcerated as a covariate.

Girls reported significantly higher CDI depression scores [$F(1,194) = 4.5$, $p = .036$] than did incarcerated boys in our sample. SSQ-6 number scores are continuous measures indicating how many times relationships were mentioned as a source of support across the 6 SSQ items. Girls' SSQ-6 number scores were higher than boys' for extended family [$F(1,194) = 3.91$, $p = .049$], non-romantic friends [$F(1,194) = 19.58$, $p < .001$], all friends [$F(1,194) = 18.06$, $p < .001$], and overall [$F(1,194 = 6.88$, $p = .009$]. Girls scores were lower for mothers [$F(1,194) = 4.63$, $p = .033$] and for fathers [$F(1,194) = 4.13$, $p = .043$] Girls' and boys' number scores did not differ for overall family support, sibling support, romantic friend support, or for satisfaction with supports. Age and the log of days incarcerated were not significant predictors of any kind of social support or depression.

In addition to the previous analyses of how many times relationships were mentioned on the SSQ (number scores), we also conducted logistic regression analyses comparing the percentages of girls and boys listing relationships at least once on the SSQ (Table 1; includes all 198 cases). Logistic regression analyses (which also used age and transformed length of incarceration as covariates) indicated that girls were less likely than boys to mention a mother ($B = -.90$, $SE\,B = .38$, Wald $\chi^2(1) = 5.73$, $p = .017$) and were trend less likely to mention a father ($B = -.63$, $SE\,B = .32$, Wald $\chi^2(1) = 3.81$, $p = .051$) at least once as part of their support systems. Girls were more likely than boys to mention at least one friend ($B = 1.98$, $SE\,B = .63$, Wald $\chi^2(1) = 9.91$, $p = .002$).

Hypotheses 2 and 3: Effects of social support and gender differences in the effects of social support on depression

We first examined bivariate associations between social support and depression scores separately for boys and girls (Table 2). Among girls, higher number scores for siblings, total family, and overall were associated with lower depression, as was girls' average satisfaction with supports. Among boys, higher number scores for extended family, non-romantic friends, total family, and overall were associated with lower depression, as was boys' average satisfaction with supports.

To test the hypotheses that social support variables would predict depression, and that this relationship would be stronger for girls than for boys, we conducted independent regression analysis for each of the summary social support variables. Age and length of incarceration were controlled in all analyses. Social support and gender variables were centered prior to calculating interaction terms. In each analysis, age, log days incarcerated, gender, one support variable, and the interaction of gender and that support variable were used as predictors of CDI depression scores. The results of the regression analyses are presented in Table 3. Results indicated that higher levels of all four summary social support variables were significant predictors of lower CDI depression scores. In addition, higher total number scores and family number scores were more strongly related to lower depression for girls than for boys (see Table 3).

Because the total family and total friend scores were significant, we examined each source of support within these broader domains separately, accounting for the same Step 1 and Step 2 variables. Within the family domain, higher mother support ($\beta = -.16$, $p = .03$), sibling support ($\beta = -.24$, $p < .001$), and extended family support ($\beta = -.22$, $p = .002$), but not father support, predicted lower CDI depression scores. Although sibling support protected against depression in both genders, this effect was stronger for girls than for boys ($\beta = -.15$, $p = .04$). Within the friend domain, non-romantic friend support predicted lower depression ($\beta = -.17$, $p = .02$), but romantic friend support did not. The effects of friend support variables on depression did not significantly vary by gender.

Discussion

The current study examined the associations between social support networks, depressive symptoms, and gender in a sample of adolescents involved in the criminal justice system. As expected, girls incarcerated in the criminal justice system reported higher levels of depression than did boys. This finding is consistent with findings that girls in general report higher levels of depression than do boys and that adolescent girls with antisocial behavior are at particularly at risk for depressive disorders and depressive symptoms (Moffitt, et al., 2001).

Results also supported the hypothesis that incarcerated girls would report more support from friends and less support from parents than would boys. Consistent with results from community based adolescent samples (i.e., Kerr et al., 2006), girls in our sample reported more support from friends (non-romantic and overall) than did boys. Girls were also more likely than boys to report having at least one friend in their social support systems. Girls also reported more support from extended family members, and roughly equivalent levels of support from siblings, romantic friends, and family overall.

On the other hand, girls reported less support from mothers and fathers than did boys and were less likely than boys to mention a mother in their support systems. There was also a trend for females to be less likely to mention a father in their support systems. For example, 84% of boys versus 70% of girls mentioned a mother (biological, step-, or foster) as a source of support, and 58% of boys versus 41% of girls mentioned a father. This gender difference is *not* found in community based (non-criminal) youth samples (cf. Buhrmester & Furman, 1987). One population-specific implication of this finding is that treatment protocols or criminal justice strategies that rely on parental involvement may be easier to implement with boys than with girls because boys are more likely to perceive their parents as supportive. Protocols or strategies may require treatment providers of girls in the criminal justice system to work harder to help the girl perceive parents as supportive or to find ways to work around the fact she may not perceive her parents as supportive.

Our hypothesis that greater social support from any source would be associated with lower depression for girls and boys was supported. Similar to findings in non criminal justice settings (Bal et al., 2003; Dumont & Provost, 1999), adolescents' overall support scores, total family support scores, total friend support scores, and satisfaction with supports were associated with lower depression. However, sub-analyses indicated that the support of some family members and friends may be more strongly associated with lower depression than others.

For example, the effect for overall family support in this criminal justice sample became more complex when family relationships were analyzed separately; sibling support and extended family strongly predicted lower depression, mother support did so weakly (but still significantly), and father support did not predict depression. These findings *contrast* with research conducted with community based youth samples (Garnefski, 2000; McFarlane et al., 1995; Stice et al., 2004), in which low parent support strongly predicts higher depressive symptoms. We wondered whether incarcerated adolescents, who may have troubled relationships with parents, depended on siblings or extended family for support instead. If that were true, one might expect that parent support scores and sibling or extended family support scores would be negatively correlated. However, mother and father support scores were positively correlated with sibling and extended family support scores in our sample, making a compensation explanation less plausible. One other study (Seginer, 1998) of non-incarcerated 11^{th} grade adolescents also found that positive sibling relationships contributed to a sense of emotional support above and beyond the contribution of mother, father, and

peer acceptance. Overall, results suggest that: 1) siblings and extended family may be an important but overlooked therapeutic resource for addressing depression among teens in the criminal justice system; and 2) although building stronger relationships with parents may be a good therapeutic goal for these teens for other reasons (i.e., reducing antisocial behavior), relationships with parents do not seem to predict depression in our sample as strongly as they have in most community-based studies.

The effect for overall friend support seemed to be driven by support from non-romantic friends. Romantic friend support had no effect on depression in this sample. However, similar to research conducted with community based youth samples (Colarossi & Eccles, 2003; McFarlane et al., 1995), overall friend support was not as strongly associated with lower depression as was total family support for criminal justice involved teens in our sample. Post hoc analyses indicated no relationship between peer support and parent support in our sample, providing no evidence that peers were used to compensate for poor parent relationships in our sample.

Based on our finding that existing peer relationships were only marginally related to depression and past findings that peer relationships can exacerbate externalizing symptoms (Bal et al, 2003; Moffitt, et al., 2001), improving existing peer relationships may *not* be the most beneficial therapeutic goal for adolescents in the criminal justice system. However, if new or existing peer relationships seem likely to reduce teens' antisocial behavior, our results suggest that developing these relationships will not hurt, and is likely to either have no effect on or slightly help, depressive symptoms. Our results suggest that developing new peer relationships may be easier for boys than for girls, because they are more likely to feel supported by parents and less likely to feel supported by existing friends.

We found mixed support for the hypothesis that the relationship between support and depression would be stronger for girls than for boys in the criminal justice system. Family support, sibling support, and overall support were particularly important for girls and were more strongly related to depression for girls than for boys. These findings and sub-analyses on family relationships suggest that although a focus on improving family supports may be a valuable therapeutic focus for all incarcerated teens, this focus may be particularly potent for depressed girls and should include siblings and extended family members.

One strength of this study is its focus on depressive symptoms, given that externalizing symptoms (i.e., antisocial behavior, substance use) predominate research literature with criminal justice involved youth. Another strength of this study is its inclusion of both genders and analysis of multiple sources of social support. Few studies have examined support from multiple sources in such a high-risk, high-need population. Furthermore, the analysis by relationships more detailed than "friends" and "family" is unique to this study and provides one of the study's contributions to the literature on teens and social support. Limitations of the study include its cross-sectional design, which prevents cause and effect conclusions from being drawn and its relatively small sample size for incarcerated girls (n = 59). Another limitation is that this study did not assess the nature of peer relations (e.g., prosocial or deviant), only whether adolescents perceived peers to be supportive. Future prospective studies may be able to shed more light on the role that different types of relationships play in the development and prevention of depressive symptoms and disorder among boys and girls involved in the criminal justice system.

Clinically, results suggest that it is important to assess adolescents' perception of their social support networks when working with criminal justice involved youth. If they perceive low support, they may be at risk for depression. This is particularly true for girls. When adolescents in the criminal justice system report depression, interpersonal treatment

approaches such as interpersonal psychotherapy (IPT; Mufson et al., 2004) or other approaches with a focus on interpersonal relationships (such as those that teach social skills or skills for coping with interpersonal stressors) may prove most efficacious. These protocols might be adapted to focus more strongly on developing sibling and extended family support, which have been important untapped resources in treating depression among these youth.

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Table 1

Composition of Incarcerated Adolescents Perceived Support Systems

	Percent reporting relationship in their support systems	
Relationship	**Boys (n = 139)**	**Girls (n = 59)**
Mother[a]	84[*]	70
Father[a]	58[+]	41
Siblings[a]	62	64
Extended family[a]	48	56
Friend	73	95[*]
Girlfriend or boyfriend	40	46

[a] includes step- and foster-families if listed by the adolescents.

[*] Logistic regression test of gender difference significant at the $p = .05$ level (age and time incarcerated were controlled).

[+] Logistic regression test of gender difference trend-significant at $p = .051$ (age and time incarcerated were controlled).

Table 2

Correlations Among Social Support Measures and CDI Depressive Symptoms by Gender

	Girls' Depression Scores (*n* = 59)	Boys' Depression Scores (*n* = 139)
Support from Family Members		
SSQ-6: Mother[a]	−.24	−.15
SSQ-6: Father[a]	−.22	−.01
SSQ-6: Sibling[a]	−.46*	−.15
SSQ-6: Extended family[a]	−.20	−.21*
SSQ-6: Total family	−.49*	−.22*
Support from Friends		
SSQ-6: Non-romantic friend	−.09	−.19*
SSQ-6: Romantic friend	−.03	.00
SSQ-6: Total friend	−.07	−.16
Overall Supports		
SSQ-6: Overall supports	−.43*	−.26*
SSQ-6: Average satisfaction with supports	−.31*	−.23*

[a]All family relationships include step- and foster-families if listed by the adolescents.

[b]Higher scores indicate *lower* self-esteem.

*$p < .05$ for Spearman correlations.

Table 3

Linear Regression Analyses Predicting CDI Depression CDI Scores as a Function of Social Support Variables and Their Interaction with Gender (N = 198)

		Linear Regression			
Step	**Variable**	**B**	**SE (B)**	***B***	**ΔR^2 for step**
Analysis 1: Total family support					
3	Total family number score[b]	−5.05	1.32	−.26**	.07**
4	Total family number score X Gender[a]	−5.83	2.83	−.15*	.02*
Analysis 2: Total friend support					
3	Romantic friend number score[b]	−2.94	1.38	−.16*	.02*
4	Romantic friend number score X Gender[a]	−.05	3.56	.00	.00
Analysis 3: Overall social support					
3	Overall number score[b]	−.21	.04	−.36**	.12**
4	Overall number score X Gender[a]	−.19	.09	−.16*	.02*
Analysis 4: Satisfaction with supports					
3	Satisfaction with supports[b]	4.67	1.13	.28**	.08**
4	Satisfaction with supports X Gender[a]	4.15	2.61	.13	.01

*$p < .05$ for predictor or ΔF

**$p < .01$ for predictor or ΔF

[a]Female = +1/2, Male = −1/2.

[b]Results for transformed scores (described in method section). The transformation for satisfaction with supports involved reversing scores, so results indicate that youth who were less satisfied with supports were more depressed.