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Youth–Family, Youth–School Relationship, and Depression

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Abstract This study sought to examine the association between adolescents' relationship with family and school and depressive symptoms across ethnic/racial groups (White, Black, Hispanic, and Asian), and to test potentially unique explanatory power in youth–family relationship versus youth–school relationship, in a sample of 4,783 adolescents. Depressive symptoms were assessed with a 19-item, modified Center for Epidemiologic Studies-Depression Scale (CES-D). The results indicated that youth–family relationship and youth–school relationship were significant predictors of adolescent depression. However, the findings of the study indicated that unique contributions by youth–family relationship and youth–school relationship were different by racial/ethnic groups. These findings elucidate protective factors for adolescent depression and highlight the importance of cultural context of each racial/ethnic group.

Keywords Family relationship · School relationship · Depression · Cross-racial

Introduction

Adolescence represents a challenging and stressful developmental phase. Apart from rapid physical and biological changes, this period entails significant changes in youngsters' social relations with parents, other family members, and peers. Many studies have documented that there is a significant increase in depressive mood from

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late childhood through early adolescence, especially in girls (e.g., Angold et al. 2002; Holsen et al. 2000; Twenge and Nonlen-Hoeksema 2002).

Links between ecological contexts and depression have been documented for both males and females across a broad age range. Researchers have long noted that adolescent depression was significantly affected by family, school, and community environments (Abrams et al. 2005; Matos et al. 2006). Some researchers have asserted that family socioeconomic status is likely to have a consistent impact on depression in children through parenting practices, which have been found to be more problematic among parents of lower socioeconomic status (Kim and Ge 2000; McLoyd 1998). Many theories of child socialization, including cognitive, social learning, and social interactional perspectives, posit a close association between children's relationship with parents, other family members, and peers and subsequent internalizing and externalizing problems (Coyne 1976a, b; George et al. 2006; McCarty et al. 2005). In healthy families, children learn that they can count on the environment to provide for their emotional security, physical safety and well-being, and they acquire behaviors that will eventually allow them to maintain their own physical and emotional health, independent of caregivers (Resnick et al. 1997). One of the most important indicators of healthy families is good relationships with parents and other family members. Sheeber et al. (2007) reported that adolescents who had a good relationship with their parents and siblings were less likely to become depressed, develop problems, or consider suicide. Resnick et al. (1997) also reported that a good relationship with parents and family members was significantly and inversely associated with emotional distress, suicidality, alcohol use, marijuana use, and early age of sexual intercourse. There is overwhelming documentation in the literature that there is a significant direct association between dysfunctional family environment and substance use (Sale et al. 2003), depression (Allen et al. 1994; Aydin and Öztütüncü 2001; Delaney 1996), disordered eating behaviors (Ackard and Neumark-Sztainer 2001), lower self-esteem (Delaney 1996), and suicidality (Fergusson et al. 2000; Hollis 1996; King et al. 2001; O'donnell et al. 2003).

Children's relationship with school is another critical aspect of their emotional development. A growing body of research reported the degree to which school environment and teachers influence children's mental health and academic achievement (Hawkins 1997; Lynn et al. 2003; Needham et al. 2004; Wentzel 1998). Goodenow (1993) reported that a child's perception of their teacher's support, or relationship with him/her, was associated with academic motivation and performance. Other studies showed links between higher levels of teacher support, reduced levels of psychological distress, and improved academic performance (Covell and Howe 1999; Wentzel 1998). Teacher support was also a significant predictor of pro-social behavior and student interest in school activities (Charlebois et al. 2004; Koomen et al. 2004; Wentzel 1998). Prior studies have provided empirical evidence that teacher support and a good relationship within the school are protective factors for adolescents' behavioral and mental health outcomes (Bowen et al. 1998; Fottland and Matre 2005; Murdock 1999; Vedder et al. 2005).

Finally, several studies have argued that racial/ethnic differences were found in the relationships between ecological factors (family or school related factors) and depression. These studies have included samples from countries such as Mexico

(e.g., Gil-Rivas et al. 2003), China, Korea, Czech Republic (e.g., Dmitrieva et al. 2004; Farruggia et al. 2004), and other ethnic groups such as African, Asian, Hispanic, and European Americans (e.g., Eamon 2002; Demaray et al. 2005). For example, Chung et al. (2009) reported that higher levels of initial depressive symptoms predicted lower levels of subsequent perceived parental and peer warmth for European Americans. For Asian Americans, higher initial depressed mood was significantly associated with lower levels of perceived peer warmth and was marginally associated with lower levels of parental warmth.

As the above literature review suggests, previous studies have found a significant association between the quality of parent–child relationship and behavioral and psychological health of youths, and association between teacher support and children's behaviors, academic performance and mental health. However, the results are limited to studies conducted on regional samples. In addition, most studies of adolescent mental health and family or school environment have been conducted with Caucasian and African–American youth. Race or ethnicity has been found to be an important moderator of the association between child–parent relationship and child mental health in some studies (Deater-Deckard et al. 1996; Spieker et al. 1999), and argues for further examination as it pertains to emotional support. Furthermore, though a number of studies have examined the importance of child relationship with parents or school, little work has been completed on the simultaneous assessment of child–parent relationship and child–school relationship, with examination of whether they provide unique or redundant information about social interaction that accounts for variability in depression or other mental health outcomes. Finally, studies have generally included fairly narrow conceptualizations of child relationship with parents and schools, or a limited number of indicators known to be salient in adolescent development. Thus, in the current analyses, we examined the cultural significance of youth–family relationship and youth–school relationship for measures of depressive symptoms in a nationwide sample of White, African–American, Hispanic, and Asian–American adolescents. Furthermore, we investigated the importance of unique effects that account for variability in the association among the selected youth–family relationship, youth–school relationship, and depression.

Our specific aims in the current study were twofold: First, we examined the association between youth relationship with family or school and depression among four ethnic/racial groups and made a comparison of them among four ethnic/racial groups. Second, we tested potentially unique explanatory power in youth–family relationship versus youth–school relationship on depression among four ethnic/racial groups and made a comparison of predictors on depression among four ethnic/racial groups.

Method

Sample and Procedure

The present study used the National Longitudinal Study of Adolescent Health (Add Health) data base (Harris et al. 2005). Although Add Heath is nearly 15 years old,

we chose it because of four main reasons: (1) it is a large, nationally representative probability sample of adolescents in the United States including diverse ethnic subgroups; (2) it contains longitudinal data to capture changes of adolescents' mental health over time; (3) it provides multiple contexts or social environments, which can be conceptualized at many levels of aggregation, from the family to the community; and (4) no alternative data set focusing on social environments and adolescent health is available at this moment. Add Health used a multistage, stratified, school-based, cluster sampling design. The sample included students from 80 high schools (both public and private), and a corresponding feeder junior-high or middle school (Bearman et al. 1998). Add Health study involved two waves of data collection and several data collection components. Wave I in-school component, self-administered questionnaire, was conducted during 1994–1995. At the same time, school administrators from each of the participating schools also completed a school administrator questionnaire regarding school characteristics. Also, school enrollment rosters were used to randomly select students from each of the schools to participate in a more extensive Wave I in-home interview. Additionally, Wave I parental questionnaires were completed by one of the participants' parents or guardians, usually a mother. Wave II, conducted in 1996, included in-home follow-up interviews with those students who completed an in-home interview in Wave I. We utilized data from the adolescent in-home interviews during Wave I and Wave II for this sub-sample (Bearman et al. 1998). The study was designed to identify the correlates of social environment and adolescent mental health, focusing on the cultural context in which young people live. The final sample of Wave I included 2,287 boys (47.8%) and 2,496 girls (52.2%), with a mean age of 16.01 (SD = 1.62, range = 11–21).

Measures

Sociodemographic Measures

Gender was a self-reported dichotomous variable. *Chronological age* in years was determined by subtracting the date of birth from the date of the interview, rounded to two decimal places. *Race* was based on respondents' self-report. For analyses, four categorical variables were created: Whites (non-Hispanic), Blacks (non-Hispanic), Hispanics, and Asians. *Family income* was based on respondents' self-report. For analyses, ratio level of response was changed to interval level, ranging from 0 (0–$999) to 8 ($501,000–$999,000).

Depressive Symptoms

Depressive symptoms were assessed with a 19-item, modified Center for Epidemiologic Studies-Depression Scale (CES-D; Randloff 1977). Construction of index is shown in "Appendix". The original 20-item scale has been used widely as a measure of depressive symptoms in epidemiologic research and as a first-stage screening tool for clinical depression in community samples. In the modified scale

utilized in Add Health, two original CES-D items were dropped, namely, "My sleep was restless" and "I had crying spells," and one new item was added; "I felt that life was not worth living." Also, two additional items were rephrased. Item scores on the modified scale correspond to the symptoms of depression, and range from 0 (never or rarely) to 3 (most or all of the time). Items were summed to form a total score after reversed scoring of four positive items. A higher index score indicates more depressive symptoms. This measure has been shown to have adequate reliability (Hann et al. 1999). In the present study, internal consistency (Cronbach's α) for the 19-item scale was .85 for Wave I and .86 for Wave II.

Youth–Family Relationship

The family relationship variable was measured by four items concerning the adolescent's relationship with his/her parents and other family members, and included items like "parents care about you" and "family understand you" (see "Appendix"). Original responses to each item were ordinal in nature, ranging from 1 (not at all) to 5 (very much). A higher index score indicates a better relationship with family. Internal consistency (Cronbach's α) for the 4 item scale was .77 for Wave I and .76 for Wave II.

Youth–School Relationship

The child–school relationship variable was intended to measure the overall feelings about school, students, and teachers. This variable was measured through an index of six questions (e.g., "Feel part of your school"), which were ordinal in nature, rating from 1 (strongly disagree) to 5 (strongly agree) (see "Appendix"). Five positive items were reverse-scored to be consistent with the direction of child–family relationship. A higher index score indicated a better school relationship. The index's reliability was .61 for Wave I and .60 for Wave II.

Statistical Analysis and Results

The descriptive data analysis was carried out using SPSS 14.0 for Windows. Gender and racial/ethnic group differences in the means of depression, family relationship, and school relationship at Time 1 and 2 were analyzed by using independent sample *t*-tests and univariate analysis of variances (ANOVA). Second, four series of hierarchical multiple regressions by ethnic/racial groups were conducted separately to predict depression at Time 2. In each regression, a series of demographic variables (sex, age, family income) and Time 1 depression were entered in the first block. In the second block, school relationships at Time1 and Time 2 were entered. Finally, family relationships at Time1 and Time 2 were entered in the last block.

The results of the univariate test shows that family income was significantly different among racial/ethnic groups, F (3, 3,785) = 65.30, $p < .001$. The result revealed no significant interaction between family income and race. Bonferroni's post-hoc test was conducted to determine which racial/ethnic groups were

significantly different in family income. Results showed that Whites and Asians had higher family income than Blacks and Hispanics. No significant difference between Whites and Asians was found.

Gender and Racial/Ethnic Group Differences in Depression, Family Relationship, and School Relationship

Independent sample *t*-tests and univariate ANOVAs were conducted separately for each time point. At Time 1, consistent with previous findings, girls were more depressed than boys among all ethnic groups. The results of the univariate test shows that depression was also significantly different among racial/ethnic groups, $F(3, 4{,}829) = 22.98$, $p < .001$. The result revealed no significant interaction between gender and race. Means and standard deviations of each group are presented in Table 1. Bonferroni's post-hoc test was conducted to determine which racial/ethnic groups were significantly different in depression. Results showed that Whites scored lower on CES-D than Blacks, Hispanics, and Asians. Blacks scored lower on CES-D than Asians. No significant difference between Hispanics and Blacks was found. Also, there was no significant difference between Hispanics and Asians. A similar pattern was found at Time 2, showing a significant gender difference [$F(1, 4{,}829) = 46.27$, $p < .001$] and racial/ethnic group difference [$F(3, 4{,}829) = 23.98$, $p < .001$]. Also, the result of Bonferroni's post-hoc test at Time 2 presented a similar pattern as Time 1. However, there was a significant difference between Blacks and Hispanics unlike Time 1.

Independent *t*-tests were separately conducted by ethnic/racial groups to determine gender differences in family relationship. Means and standard deviations of each group were presented in Table 2. The results showed that Black boys had a better family relationship than Black girls at Time1. Also, Hispanic boys had a better relationship with their family than Hispanic girls at Time 2. A univariate test was conducted to determine racial/ethnic group differences in family relationship. At Time 1, main effect results revealed that family relationship was significantly different among racial/ethnic groups, $F(3, 4{,}818) = 3.36$, $p < .05$. The result revealed no significant interaction between gender and race. Estimates of effect size presented a low strength in associations. Bonferroni's post-hoc test was conducted to determine which racial/ethnic groups were significantly different in family relationship. Results showed that Blacks had a better family relationship than Asians. No significant differences among other groups were found. The results of Bonferroni's post-hoc test at Time 2 revealed no significant differences among ethnic/racial groups.

Finally, we tested gender and racial/ethnic group differences in school relationship. The results indicated no racial/ethnic group differences at both Time 1 and Time 2. Black boys had a better relationship with school than Black girls at Time 2 (see Table 3).

Predictors of Depression Across Racial/Ethnic Groups

The results showed that depression at Time 1 was the most significant predictor of depression at Time 2 across all ethnic groups. In the analysis predicting depression

Table 1 Concurrent associations among racial/ethnic groups and depression

	Gender differences (mean & SD)				Post-hoc comparisons (mean differences & SE) by race					
	White (n = 2,952)	Black (n = 1,137)	Hispanic (n = 553)	Asian (n = 118)	W vs. B	W vs. H	W vs. A	B vs. H	B vs. A	H vs. A
T1 CES-D										
Boys	10.71 (6.60)	11.85 (7.33)	12.23 (6.50)	13.43 (7.07)	−1.16*** (.26)	−2.12*** (.34)	−3.04*** (.56)	−.96 (.38)	−1.88** (.58)	−.92 (.63)
Girls	12.38 (7.71)	13.50 (8.50)	15.08 (8.14)	15.77 (7.24)						
t-value	−6.30***	−3.49***	−4.53***	−2.24*						
T2 CES-D										
Boys	10.45 (6.79)	11.82 (6.89)	12.61 (6.41)	12.82 (5.63)	−1.03*** (.26)	−2.44*** (.35)	−2.73*** (.56)	−1.40** (.39)	−1.70* (.59)	−.29 (.63)
Girls	12.60 (7.95)	13.29 (8.09)	15.34 (8.56)	15.76 (8.72)						
t-value	−7.88***	−3.27**	−4.22***	−2.74**						

A higher score indicates more severe depression

T1 Time 1, *T2* Time 2, *W* white, *B* black, *H* Hispanic, *A* Asian

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 2 Concurrent associations among racial/ethnic groups and family relationship

	Gender differences (Mean & SD)				Post-hoc comparisons (mean differences & SE) by race					
	White (n = 2,952)	Black (n = 1,137)	Hispanic (n = 553)	Asian (n = 118)	W vs. B	W vs. H	W vs. A	B vs. H	B vs. A	H vs. A
T1 FR										
Boys	16.21 (2.57)	16.49 (2.75)	16.39 (2.89)	15.77 (2.92)	−.16 (.26)	−.11 (.13)	−.47 (.21)	.05 (.14)	.64* (.22)	.58 (.23)
Girls	16.03 (2.83)	16.10 (2.90)	16.08 (2.89)	15.52 (2.96)						
t-value	1.73	2.28*	1.27	.60						
T2 FR										
Boys	15.91 (2.71)	16.27 (2.94)	16.48 (2.87)	15.96 (2.90)	−.16 (.10)	−.19 (.13)	.41 (.22)	−.03 (.15)	.57 (.23)	.60 (.24)
Girls	16.09 (2.83)	16.06 (3.04)	15.91 (3.17)	15.23 (3.21)						
t-value	−1.70	1.17	2.18*	1.63						

A higher score indicates better relationship with family

T1 Time 1, *T2* Time 2, *FR* family relationship

* $p < .05$

at Time 2 among Whites (full results are presented in Table 4), the demographic variables were not significant predictors. The second block of predictor variables, which included school relationship at Time 1 and Time 2, accounted for an additional 7% of the variance in depression at Time 2. Only school relationship at Time 2 was a significant predictor of depression at Time 2 ($\beta = -.30$, $p < .001$). The addition of family relationship at Time 1 and Time 2 on the third block accounted for an additional 3% of variance in the prediction of depression at Time 2. Family relationship at Time 2 ($\beta = -.21$, $p < .01$) was a significant predictor relative to the other variables, and school relationship at Time 2 was the only other significant predictor.

In the hierarchical regression model within the Black group, family income was a significant predictor of depression at Time 2 in block 1 and block 2. The addition of school relationship at Time 1 and Time 2 in the second block accounted for an additional 3% of variance in depression at Time 2. Relative to the other variables in the equation, school relationship at Time 2 was the best predictor of depression at Time 2 ($\beta = -.19$, $p < .01$), and family income remained a significant predictor ($\beta = .16$, $p < .05$). With the addition of the third block, family relationship accounted for an additional 3% of the variance in depression at Time 2, with family relationship at Time 2 demonstrating a significant association ($\beta = -.24$, $p < .01$) with depression at Time 2, and school relationship at Time 2 remained as a significant predictor.

The results of the Hispanic group indicated that demographic variables were not significant predictors. The second block of predictor variables, which included school relationship at Time 1 and Time 2, accounted for no additional variance in depression at Time 2 unlike the other ethnic/racial groups. The addition of family relationship at Time 1 and Time 2 in the third block accounted for an additional 5% of variance in the prediction of depression at Time 2. Family relationship at Time 2 ($\beta = -.24$, $p < .01$) was a significant predictor relative to the other variables.

In the final hierarchical regression model in the Asian group, demographic variables were not significant predictors. The addition of school relationship at Time 1 and Time 2 in the second block accounted for an additional 3% of variance in depression at Time 2. Relative to the other variables in the equation, school relationship at Time 2 was the best predictor of depression at Time 2 ($\beta = -.18$, $p < .01$). With the addition of the third block, family relationship accounted for an additional 6% of the variance in depression at Time 2. However, there were no predictors of depression at Time 2, with the exception of depression at Time 1. Also, the results of the current study indicated that unique contributions by youth–family relationship were relatively larger in Asian and Hispanic groups than White and Black groups, while unique contributions by youth–school relationship were larger in White and Black groups than Asian and Hispanic groups (see Table 4).

Discussion

The aim of the present study was to explore associations among adolescents' relationship with family and school and depressive symptoms in four different

Table 3 Concurrent associations among racial/ethnic groups and school relationship

	Gender differences (mean & SD)				Post-hoc comparisons (mean differences & SE) by race					
	White (n = 2,952)	Black (n = 1,137)	Hispanic (n = 553)	Asian (n = 118)	W vs. B	W vs. H	W vs. A	B vs. H	B vs. A	H vs. A
T1 SR										
Boys	21.54 (4.19)	21.72 (4.09)	21.79 (4.27)	21.96 (3.50)	−.02 (.15)	−.14 (.20)	−.50 (.32)	−.12 (.22)	−.48 (.33)	−.37 (.36)
Girls	21.49 (4.24)	21.37 (4.55)	21.52 (4.00)	22.08 (3.80)						
t-value	.34	1.37	.74	−.22						
T2 SR										
Boys	21.65 (4.13)	21.73 (4.12)	21.79 (3.96)	22.00 (3.54)	.18 (.15)	.12 (.20)	−.47 (.32)	−.07 (.23)	−.66 (.34)	−.59 (.37)
Girls	21.51 (4.35)	21.10 (4.15)	21.17 (3.96)	22.09 (3.38)						
t-value	.90	2.50*	1.74	−.18						

A higher score indicates better relationship with school

T1 Time 1, *T2* Time 2, *SR* school relationship

* $p < .05$

Table 4 Hierarchical regression: predicting depression at Time 2

		Sex	Age	Income	D1	School		Family		F	df	R^2	ΔR^2
						S1	S2	F1	F2				
White ($n = 227$)	β Block1	.05	−.06	.01	.62***					24.86	(4, 161)	.38	
	β Block2	.09	−.02	.01	.54***	.05	−.30***			21.61	(6, 159)	.45	.07***
	β Block3	.09	−.01	.01	.53***	.01	−.24**	.14	−.21**	17.97	(8, 157)	.48	.03*
Black ($n = 206$)	β Block1	.04	−.02	.21**	.72***					37.43	(4, 126)	.54	
	β Block2	.03	−.03	.16*	.68***	.03	−.19**			27.36	(6, 124)	.57	.03*
	β Block3	.03	−.05	.10	.67***	.07	−.18*	.07	−.24**	23.22	(8, 122)	.60	.03**
Hispanic ($n = 195$)	β Block1	.01	−.01	−.01	.70***					29.44	(4, 122)	.49	
	β Block2	.01	−.00	−.01	.71***	.04	−.02			19.38	(6, 120)	.49	.00
	β Block3	.01	.01	−.01	.66***	.09	−.01	.01	−.24**	17.31	(8, 118)	.54	.05**
Asian ($n = 188$)	β Block1	.06	.02	−.08	.55***					12.95	(4, 108)	.32	
	β Block2	.06	.02	−.09	.54***	.06	−.18*			9.46	(6, 106)	.35	.03
	β Block3	.04	−.02	−.10	.49***	.07	−.14	.07	−.21	8.97	(8, 104)	.41	.06**

Block 1 demographic variables-gender, age, income, *Block 2* demographic variables, S1, S2, *Block 3* demographic variables, S1, S2, F1, F2

D1 depression at Time 1, *S1* school relationship at Time 1, *S2* school relationship at Time 2, *F1* family relationship at Time 1, *F2* family relationship at Time 2

All regression models were significant at $p < .01$. * $p < .05$. ** $p < .01$. *** $p < .001$

ethnic/racial groups. The results of this large study of adolescents indicate that youths' good relationship with family and school were associated with lower depressive symptoms. These results are consistent with past research, which indicated that family and school connectedness were significantly associated with several health risk behaviors and negative emotional health indicators (Resnick et al. 1997), as well as depressive symptoms and low self-worth (Delaney 1996). These findings demonstrate that family and school contexts are important developmental settings and should be examined more closely with regard to their impact on adolescents' depressive symptoms. Yet the current study adds to the literature by demonstrating these significant relationships with simultaneous examination in different ethnic/racial groups. Results of the current study indicated that Hispanic and Asian groups had relatively higher depressive symptom scores than White and Black groups. These "at risk" adolescents may be "caught between cultures." In other words, they may be caught between the influence of traditional values and norms of their original countries and their experiences in the mainstream society. Future research should further examine the relative and specific contribution of acculturative stress or culturally-based family conflict within minority and immigrant families. Additionally, our results indicated that unique contributions of youth–family relationship were relatively larger in Asian and Hispanic groups than White and Black groups, while the unique contribution of youth–school relationship was larger in White and Black groups than Asian and Hispanic groups. Work by Perreira and his colleagues reported that family factors including family structures and roles are one of the most important factors of Hispanic children's mental health (Perreira et al. 2006).

Considering the current direction of preventive interventions, the results further suggest that there may be a value in thinking about a culturally-specific and family-focused intervention around goals that may have both direct impact (e.g., individual interventions geared toward reducing depression) and indirect impact (e.g., promoting family communication) on mental health. The intervention may include the following modules: (1) Rapport building and education about depression including introduction of an interpersonal model; (2) Communication training; (3) Fun activities scheduling; and (4) Problem solving. It is recommended to include the school-aged adolescents and his/her parent(s) in all sessions due to the importance of parent–child interactions.

In contrast to the previous studies (Kim and Ge 2000; Goodman et al. 2003; McLoyd 1998), the results of the current study showed that family income was not a significant predictor of depression in most racial/ethnic groups. Although descriptive analysis of the study shows that there are no significant income differences across ethnic groups, only black group presented that family income was a significant predictor with youth–school relationship. No studies about the relationship between family income and depression among African American adolescents exist so far. More research is needed to test cultural variability in the relationship between family income and adolescents' depression.

A number of shortcomings in the current study require caution in interpretation of the findings, as they potentially limit implications and generalizability. First,

changing patterns in depression among U.S. adolescents since the time these data were collected in the mid 1990s may limit the relevance of the findings. Second, the present study was based exclusively on student in-home interviews. Simultaneous measurement by using different data sources (e.g., parents' ratings, teachers' ratings, students' ratings, and behavioral observation) is strongly recommended. Third, the use of a self-reported continuous measure of depression instead of a clinical diagnosis was another limitation of the study. Although it has been argued that a quantitative approach provides a broader assessment of depression (e.g., Caron and Rutter 1991; Flett et al. 1997), the present findings might not necessarily generalize to clinical depression. The present findings thus need to be replicated in future studies using continuous measures as well diagnostic criteria based on a variety of sources. Fourth, this study treats Asian–American adolescents and Hispanic adolescents as homogeneous groups for analytic purposes. It should be noted that Asian–Americans and Hispanic–Americans have huge cultural variability by country of origin and religious affiliations. The same can be said for Black and White cultures, but to a less degree. Fifth, although selected items for each independent variable had acceptable reliabilities, limited conceptualization and lack of empirical evidence about validity was recognized. More comprehensive indicators based on full conceptualization of family and school relationships should be selected and used in future studies. In addition, the present study investigated only direct influences of the relationship with family and school on depression. Some moderating or mediating variables between the quality of the child's relationship with family and school and depression should be recognized and tested for a more comprehensive risk-resiliency model. Perceptions of family and school environment, peer relationship, and a wealth of other structural and process variables may be (and have been) linked with adolescent depression. For example, the quality of school environment, access to mental health services in the school or in the local community, processes that encourage students' attachment to school and adults within that setting, as well as stressful experiences in the school setting, may also be important in understanding other pathways through which schools might influence adolescent mental health. Another limitation is that we used race/ethnicity as for proxy for culture. For further studies, race/ethnicity should be carefully used with precisely assessing the relative roles of acculturation and SES (Jones et al. 2002). Finally, it should also be noted that, although this study focused upon depression, it is quite possible that the theoretical processes proposed would also apply to other internalizing symptoms (e.g., anxiety), and future research will be needed to examine the degree of specificity to depression versus other internalizing disorders.

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Appendix: Construction of Indices

Depression symptoms (19 items)

Please tell me how often you have felt this way during the past week.
Answers range: 1 (rarely or none of the time) to 5 (most or all of the time)

1. In past week bothered by things.
2. In past week had poor appetite.
3. In past week had the blues.
4. In past week felt just as good as other people.*
5. In past week had trouble keeping mind focused.
6. In past week felt depressed.
7. In past week too tired to do things.
8. In past week hopeful about the future.*
9. In past week felt life had been a failure.
10. In past week felt fearful.
11. In past week felt happy.*
12. In past week talked less than usual.
13. In past week felt lonely.
14. In past week people unfriendly to you.
15. In past week enjoyed life.*
16. In past week felt sad.
17. In past week felt people dislike you.
18. In past week hard to start doing things.
19. In past week felt life not worth living.

* The scoring of positive items is reversed.

Relationship with family (3 items)

Questions pertain to family.
Answers range: 1 (Not at all) to 5 (Very much)

1. Parents care about you.
2. Family understand you.
3. Family has fun together.
4. Family pays attention to you.

School relationships (6 items)

Questions pertain to school.
Answers range: 1 (Strongly agree) to 5 (Strongly disagree)

1. Feel close to people at school.*
2. Feel part of your school.*
3. Students at school are prejudiced.

4. Happy at your school.*
5. Teachers treat students fairly.*
6. Feel safe in your school.*

* The scoring of positive items is reversed.

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