RMLE Online
Research in Middle Level Education

Micki M. Caskey, Ph.D., Editor
Portland State University
Portland, Oregon

2008 • Volume 31 • Number 10 ISSN 1940-4476

Parents' Relationships and Involvement: Effects on Students' School Engagement and Performance

Yun Mo
Kusum Singh
Virginia Polytechnic Institute and State University
Blacksburg, VA

Abstract

This study focused on parents' relationships and involvement in their children's lives and the effects on the students' school engagement and school performance. The study used the Wave I data from the National Longitudinal Study of Adolescent Health (Add Health). The data on seventh and eighth grade students' school and family experiences were analyzed using structural equation modeling. The study examined the effect of parents' relationships and involvement on students' cognitive, emotional, and behavioral engagement in school and subsequently on school performance. The results confirmed the importance and significance of parents' involvement in middle school students' school engagement and performance. The study has implications for practice and provides empirical support for creating school structures that would foster parents' continued interest and engagement in their children's education.

Introduction

The purpose of the present study is to examine how parents' relationship with their children and parents' involvement in the middle school affects the children's school engagement and performance. The importance of parent involvement in adolescents' education has been identified repeatedly as a critical factor contributing to students' school attainment (Henderson & Berla, 1996; Kellaghan, Sloane, Alvarez, & Bloom, 1993). Parental engagement is the proactive involvement of parents in a student's education. This involvement is initiated by the parents as part of their responsibility for children's psychosocial and educational development and is likely to influence students' educational engagement and performance.

Researchers have identified many styles of parental involvement, based on different parenting styles from authoritarian to hands-off. According to Mayseless, Scharf, and Sholt (2003), authoritarian parenting is described as "demanding, using power-assertive practices and being low in responsiveness" (p. 428). Authoritarian parenting has been considered ineffective. In contrast, authoritative parenting practices were described as demanding, warm, and involved, and such responsiveness appears to protect adolescents from early initiation of problem behavior and facilitate development of school engagement, academic performance,

and future social competence (Steinberg, 2001). However, parents tend to be less involved with their children during middle school than they are during elementary school (Downs, 2001; Johnston, 1998). Downs reported that parents of middle school students are only half as likely as the parents of elementary school students to attend student conferences. Johnston reported that less than half of the parents of middle school students are actively engaged in school programs and activities. There is a dearth of studies that focus on parent involvement and engagement in middle school years.

Simons-Morton and Crump (2003) explained that the reason why parents are less involved during children's middle school level is "possibly because most middle schools are relatively large and located at some distance from the neighborhoods they serve" (p. 121), so parents have less chance to talk with teachers about their children's overall school adjustment, engagement, performance, and behavior at school. In a review of middle school literature investigating the possible contributors to decreased parental involvement during early adolescence, Davis and Lambie (2005) found that both students' stage of development and growing interest in peers and others outside the family and the schools' lack of a planned approach to continued parental involvement in school activities and academics lower the participation of parents in their children's academic and social life at school. Yet, the evidence suggests that parental involvement is not only still important for middle school students' school success, but also for later academic success (Catsambis, 2001).

The present study examined the effects of parental involvement on students' academic engagement in school and school performance. The parental involvement has been considered a multidimensional construct with multiple domains (Singh, et al., 1995). In this study, the parental involvement had three components: parent-child relationship, parental involvement in school, and parents' educational aspirations for their child. Following the motivational model of Grolnick, Ryan, and Deci (1991), which specifies children's "inner motivational resources" as mediators between parents' behavior and children's school performance, children's school engagement was considered a mediating factor between parental behaviors and school performance. The study examined both the indirect effect of parental involvement on school achievement through students' engagement and the direct effect of parents' involvement on school performance. Thus, the study treats the students' three components of school engagement (behavioral, emotional, and cognitive) as mediating factors between parents' involvement and school performance. Researchers hypothesized that parents' involvement in their adolescents' life would enhance the students' engagement in school, and increased student engagement would further increase school performance. Furthermore, gender- and ethnicity-based differences in the relationship of parental involvement to students' engagement and performance were explored.

The research questions that guided this study were: (1) What are the direct effects of parents' involvement on student engagement and school achievement? (2) What are the indirect effects of parents' involvement on school performance through students' school engagement? (3) Do those effects vary by ethnicity and gender?

Theoretical Framework

Academic Engagement

Academic engagement is a multidimensional construct and has been variously defined. A generally used definition is "psychological investment in and effort directed toward learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote" (Newmann, Wehlage, & Lamborn, 1992, p. 12). Engagement can be indicated by both emotional and behavioral factors (Newmann, 1992). Some authors (Finn & Rock, 1997) suggest that there are three levels of behavioral engagement—with the first involving basic school attendance and completion of schoolwork, the second involving participation in class when requested by school officials (e.g., answering a question when called upon), and the third involving active participation (e.g., asking questions and doing extra work) (Lamborn, Brown, Mounts, & Steinberg, 1992). Some other researchers (Connell, Beale-Spencer, & Aber, 1994) have suggested that factors such as how much students like school, how bored they feel in school, and how strongly they feel that they belong in school are emotional engagement. In later research, Fredericks, Blumenfeld, and Paris (2004) added another dimension to the definition of engagement. They indicated that engagement contains behavioral, emotional, and cognitive components. Emotional engagement includes affect, interest, identification with school, and

belonging. Cognitive engagement is centered on self-regulation, strategic thinking, and psychological investment. In this research, we followed Fredericks and associates' (2004) theory and composed three engagement constructs—reflecting behavioral, emotional, and cognitive components.

Parents' Relationship and Involvement

Earlier studies have found that parental involvement in adolescents' schooling seems to have implications for students' educational decisions and involvement in learning. Parental involvement and communication about school related topics motivate their adolescents' academic behaviors. Singh and associates (1995), using NELS data, conceptualized parents' involvement as a multidimensional construct and found positive effects of parental involvement on school grades. Keith, Keith, Bickley, Trivette, and Singh (1993) reported that of all the components of the parents' involvement, nurturing and conveying higher educational aspiration for their children had the strongest effect on children's school performance.

Some researchers examined the effects of parents' involvement on students' motivation and school engagement. Pomerantz, Moorman, and Litwack (2007) found that parents' behavioral involvement enhances students' achievement because it fosters students' motivation and engagement in school. Though many studies have identified a relationship between adolescents' family experiences and their levels of engagement, these studies have most generally concentrated on demographic characteristics of the family, such as its socioeconomic status (SES). For instance, Berends (1995) found that students whose families had a higher SES showed higher levels of school engagement, where engagement was measured by how much students liked school and how much time they spent on homework. While Sirin and Rogers-Sirin (2004) found students' performance was enhanced by behavioral and emotional engagement of students and was related to strong parent-student relationship, they ignored the links between parent-student relationship and students' school engagement. However, not all studies have reported SES and engagement are positively related (Redd, Brooks, & McGarvey, 2001). Connell, Halpern-Felsher, Clifford, Crinchlow, and Usinger (1995) found an indirect negative relationship between family SES and parents' support and in turn, students' school engagement in a cross-sectional analysis using a sample of African American middle school boys. It is evident that the research findings are inconsistent and there is need for more empirical research to understand fully the relationship of parents' involvement to their children's academic engagement and achievement at middle level grades.

Methods

Data Sources

In this study, the data were accessed from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study that explores the causes of educational and social behaviors of adolescents in grades 7 through 12 and their outcomes in young adulthood. Add Health seeks to examine how social contexts (families, friends, peers, schools, neighborhoods, and communities) influence adolescents' behaviors. Initiated in 1994 under a grant from the National Institute of Child Health and Human Development (NICHD) with co-funding from 17 other federal agencies, Add Health is the largest, most comprehensive survey of adolescents. The public use Add Health data were collected in two waves. Wave I (collected between September 1994 and December 1995) was collected from students grades 7 through 12 and Wave II of the data (collected from April 1996 through August 1996) consists of the adolescent follow-up interviews. It includes three sets of data available for public use. The in-school data were collected from students in grades 7 through 12 and consist of responses to questions about social and demographic characteristics of the respondents, the education, and occupation of parents, household structure, risk behaviors, expectations for the future, self-esteem, health status, friendships, and school-year extracurricular activities. The in-home dataset consists of responses to a detailed and lengthy interview of a subset of adolescents who were selected from the rosters of the sampled schools. Moreover, the parent data were collected from one parent or parent-figure for each in-home sampled student (Kelley & Peterson, 1997). Because of our focus on middle school students, we only selected Wave I data from 7–8 graders for this study (N = 1,971).

Item and Constructs

School performance. Academic performance was assessed by school grades in four subject areas: mathematics, science, history or social studies, and language arts. The range for subject scores was 1 *(D or lower)* and 4 *(A).* Here school performance was measured by taking the average of subject grades.

Parents' relationships and involvement. We created three parents' relationship and involvement constructs: *parental involvement in school, parent-child relationship,* and *parents' educational aspiration for the child. Parental involvement in school* is the sum of six dichotomous items. Which of the things listed on this card have you done with your MOTHER: (a) talked about your schoolwork or grades, (b) worked on a project for school, and (c) talked about other things you're doing in school. Which of the things listed on this card have you done with your FATHER: (a) talked about your schoolwork or grades; (b) worked on a project for school; and (c) talked about other things you're doing in school. *Parent-child relationship* is a composite of five items: Parents care about you; family understands you; want to leave home (the item was recoded); family has fun together; family pays attention to you. All items are 1 to 5 scales with 1 indicating a low and 5 indicating strong relationship. *Parents' educational aspiration* is a composite of the following four items: On a scale of 1 to 5, where 1 is low and 5 is high, how disappointed would your mother be if you did not graduate from college? If you did not graduate from high school? And how disappointed would your father be if you did not graduate from college? If you did not graduate from high school? (See Table 1 for details.)

Students' school engagement. In creating measures of school engagement, we followed Fredericks et al.'s (2004) three types of engagement—behavioral, emotional, and cognitive engagement. Table 2 presents the detailed items and descriptive statistics. *Behavioral engagement* included four items: Since school started this year, how often have you had trouble (a) getting along with your teachers? (b) paying attention in school? (c) getting your homework done? and, (d) getting along with other students? The responses were never, just a few times, about once a week, almost every day, and every day. *Emotional engagement* included five items, which were (a) You feel close to people at your school; (b) You feel like you are part of your school; (c) You are happy to be at your school; (d) The teachers at your school treat students fairly; and (e) You feel safe in your school. *Cognitive engagement* was about educational aspirations and included two items: (a) On a scale of 1 to 5, where 1 is low and 5 is high, how much do you want to go to college? and (b) On a scale of 1 to 5, where 1 is low and 5 is high, how likely is it that you will go to college? All items were recoded so higher score indicated higher school engagement. Each composite was created by taking the average of corresponding items. Reliability analysis of all the measures yielded adequate Cronbach's alpha values (> .732).

Model and Analyses

We estimated a structural equation model of the hypothesized relationships among observed variables, using LISREL 8.8 computer program (Jöreskog & Sörbom, 2006). Structural equation modeling (SEM) is an especially appropriate method for analyzing non-experimental data. In addition to parameter estimates, the program provides fit indices to assess how well the model fits the data. Such fit indices make it possible to evaluate the adequacy of the theoretical model in explaining the data (Bollen, 1989; Schumacker & Lomax, 2004). We tested the fit of the model using maximum likelihood estimation.

In evaluating the overall goodness-of-fit for the SEM model, Schumacker and Lomax's (2004) criteria were used: (a) the chi-square and *p* value, which if $p > .05$ indicates that there are no statistically significant discrepancies between sample variance-covariance matrix and the reproduced implied covariance matrix; (b) Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI) and Comparative Fit Index (CFI) values close to .95 reflect a good fit and 1.0 indicate a perfect fit; (c) Normed Fit Index (NFI), which defines the null model as a model in which all the correlations or covariances are zero and value close to .95 reflects a good model fit; (d) Root-Mean-Square Error of Approximation (RMSEA) value less than .05 indicates a good model fit. These fit indices indicate how well the data support the model.

We had hypothesized that the three constructs reflecting parents' involvement were correlated and had direct effects on three students' school engagement constructs and school performance. In turn, three engagement

Table 1
Parents' Relationship and Involvement Factors

Item	M	SD
Parents' Involvement in School		
Mom-Talked School-Grades	.601	.490
Mom-Worked School-Project	.185	.389
Mom-Talked School-Other	.504	.500
Dad-Talked School-Grades	.483	.500
Dad-Worked School-Project	.154	.361
Dad-Talked School-Other	.410	.492
Parent-Child Relationship		
Parents Care About You	4.852	.496
Family Understand You	3.863	.968
Want to Leave Home (Recoded)	4.336	1.037
Family Has Fun Together	4.045	.969
Family Pays Attention to You	4.153	.921
Parents' Educational Aspiration		
Mom Feels If Adolescent Not College Graduate	4.022	1.229
Mom Feels If Adolescent Not High School Graduate	4.678	.904
Dad Feels If Adolescent Not College Graduate	4.091	1.190
Dad Feels If Adolescent Not High School Graduate	4.695	.875

constructs also directly affected school performance. This means there were three exogenous variables (*parental involvement in school, parent-child relationship,* and *parents' aspiration*) and four endogenous variables (*students' behavioral, emotional, cognitive engagement* and *school performance*). Since not all paths were significant, we deleted these paths one by one sequentially to arrive at a more parsimonious model. Furthermore, we followed the suggested modifications in the model, adding reasonable new paths until all fit indices were in the acceptable range (Bollen, 1989).

After estimating the final model of parents' involvement, students' school engagement, and school performance, we did follow-up analyses to examine the gender and ethnicity differences in parental involvement, students' engagement, and school performance. Therefore, we conducted a multivariate analysis of variance (MANOVA) to answer the third research question. Race and gender were the two independent variables and the average of parents' involvement constructs, the average of three school engagement constructs, and school performance were the three outcome variables in this multivariate ANOVA model.

Table 2
Item and Descriptive Statistics for Scales

Scale and Item	M	SD	Cronbach's α
Students' School Engagement			
Behavioral			.732
Trouble-Getting Along Teachers	4.002	1.072	
Trouble-Paying Attention	3.872	1.040	
Trouble-Getting Homework Done	3.943	1.075	
Trouble-With Other Students	3.986	1.054	
Emotional			.773
Feel Close to People at School	3.809	.963	
Feel Part of Your School	3.986	.953	
Feel Safe in Your School	3.773	1.120	
Happy at Your School	3.611	1.086	
Teachers Treat Students Fairly	3.836	1.044	
Cognitive			.788
Want to Attend College	4.556	.918	
Likely Will Attend College	4.221	1.071	

Results and Discussion

Item correlations and standard deviations are given in Table 3. We excluded missing cases by listwise deletion, so the valid sample size reduced to 1,235.

We examined direct and indirect effects for significance and magnitude (see Table 4). The final model overall explained 21% of variance in school performance. The fit indices for the model were high, indicating a well-fitting model in which data fit well to the final model, χ^2 (4) = 1.684 ($p > 0.05$). The Goodness-of-Fit Index (GFI) was 1.00, and the Adjusted Goodness-of-Fit Index (AGFI) was .997. The Comparative Fit Index (CFI) was 1.00. Normed Fit Index (NFI) was .999. The Root-Mean-Square Error of Approximation was .00.

Table 3
Item Descriptive and Correlation Wave I (N = 1235*)*

	Mean	S D	1	2	3	4	5	6
1. Academic achievement	2.995	.734	-					
2. Parental involvement in school	2.291	1.946	.119**	-				
3. Parent-child relationship	4.247	.626	.158**	.161**	-			
4. Parental aspiration	4.408	.841	.161**	.029	.088**	-		
5. Students' school behavioral engagement	4.020	.753	.332**	.064*	.263**	.050	-	
6. Students' school emotional engagement	3.882	.694	.203**	.090**	.302**	.074**	.348**	-
7. Students' school cognitive engagement	4.454	.866	.354**	.076**	.104**	.250**	.204**	.169**

** $p < 0.01$
* $p < 0.05$

Overall, these fit indices indicate a theoretically sound model that explained the data well. These fit indices also indicate a close to fully saturated model, meaning almost all paths are being estimated.

Table 4
Direct, Indirect, and Total Effects on School Performance (N = 1,235)

	Students' School Engagement									School Performance		
	Cognitive			Emotional			Behavioral					
	direct	indirect	total	direct	indirect	total	direct	indirect	total	direct	indirect	total
Parents' Involvement												
aspiration	0.25		0.25	0.02	0.02	0.05		0.04	0.04	0.07	0.07	0.13
relationship	0.16		0.16	0.35	0.02	0.36	0.19	0.14	0.33		0.14	0.14
involvement in school	0.03		0.03		0.01	0.01		0.01	0.01	0.03	0.01	0.04
Students' School Engagement												
cognitive				0.10		0.10	0.10	0.03	0.14	0.20	0.04	0.24
emotional							0.35		0.35	0.04	0.10	0.14
behavioral										0.28		0.28

Figure 1 elaborated all the significant links between the variables. Because the final model was considered adequate, we interpreted the direct and indirect effects for significance and magnitude (see Table 4). All path coefficients were significant. Parental aspiration had direct effect on students' cognitive (β = .25) and emotional engagement (β = .02); parent-child relationship had direct effect on all three student-school engagement constructs (β = .16, .35 and .19 respectively); and parental involvement in school had direct effect on school cognitive engagement (β = .03). Therefore, we could conclude that parents' involvement had significant effects on students' school engagement. The direct effects on school performance were not only from all three students' school engagement constructs, but also from parental aspiration, and parental behavior. The strongest direct effect was from students' school behavior (β = .28) on school performance. Though there was no significant direct effect from parents-child relationship to school performance, there was significant indirect effect (β = .14). For all effects on the students' school engagement and performance see Table 4.

We concluded that both parents' relationship and involvement, and students' school engagement had significant effects on students' school performance. Since all path coefficients were positive, highly involved parents would motivate their children to higher engagement in their academic work, and in turn, the students' engagement in school will lead to higher achievement. This is an important finding and has practical and policy implications for both parents and schools. Parents should realize the importance of their involvement and participation in schooling of their children and stay involved in their children's daily lives, despite the growing independence of adolescent children.

To investigate further the differences among ethnic groups, we conducted a MANOVA. The results showed there was overall significant difference among ethnic groups ($F = 4.968$, $p < 0.01$). There was also overall significant difference between male and female students ($F = 5.370$, $p < 0.01$); however, there was no interaction effect of gender and ethnic group on any of the outcomes. Therefore, we further investigated the ethnic and gender groups separately to identify the significant differences in parent's involvement, school engagement, and school performance.

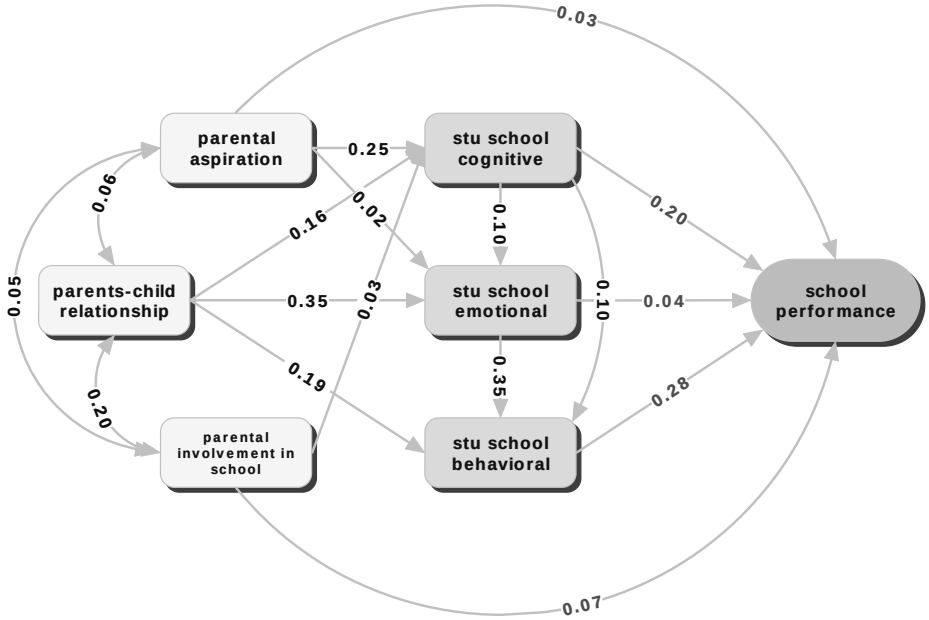

Figure 1. Final model of school performance: Effects of parents' involvement on students' school engagement and performance.

Ethnicity: The school performance ($F = 4.431$, $p < 0.01$) and school engagement ($F = 3.806$, $p < 0.01$) were significantly different among different ethnic groups while parents' involvement ($F = .284$, $p > 0.05$) was not. Tukey HSD post-hoc comparison showed Asian students were significantly higher than other three groups in school performance and school engagement. Asian students had the highest engagement ($\overline{X} = 4.40$) and had the highest achievement ($\overline{Y} = 3.31$), while other three ethnic groups (white, black, and Hispanic) were not significantly different from each other.

Gender. Only school performance was significantly different between male and female students ($F = 15.055$, $p < 0.01$), while there were no significant gender-based differences in either parent's involvement or students' engagement. Girls had higher performance in school. There was no significant difference between girls and boys in their school engagement and parents' involvement. (See Figure 2 and Table 5 for details.)

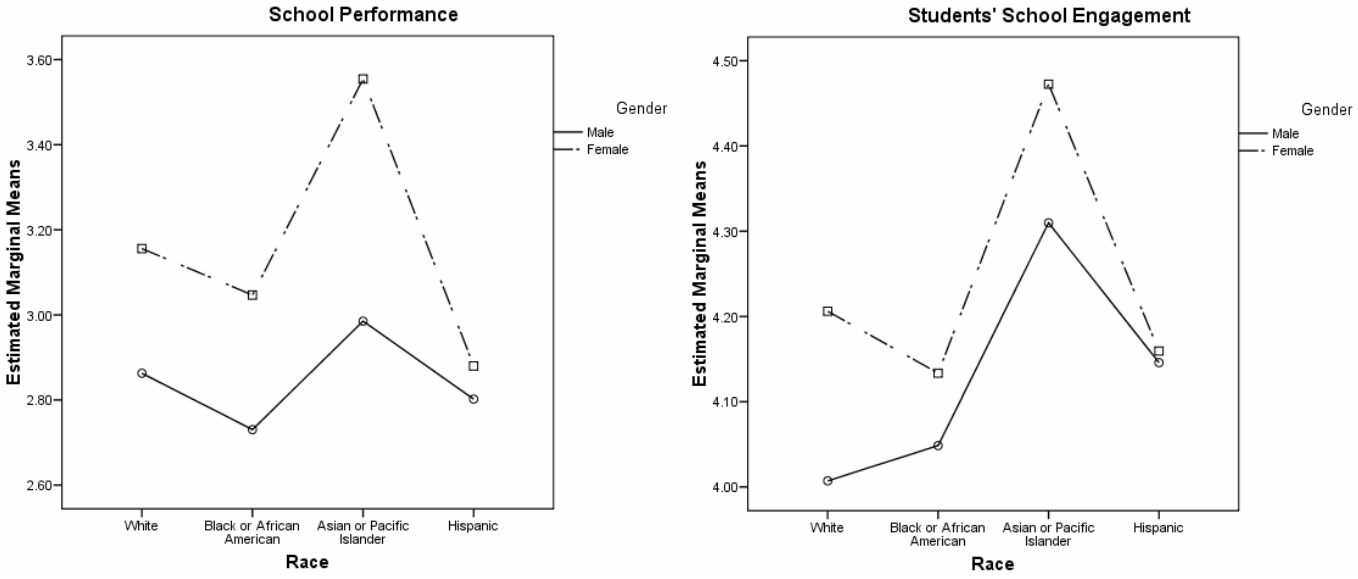

Figure 2. Multiple comparisons for school performance and school engagement.

Summary and Implications

The study examined an important topic of relationship of parental involvement to school engagement and achievement of adolescents. Adolescence is a critical period of intrapersonal and interpersonal changes. Despite the common myths about adolescents pulling away from their families and not wanting their parents' involvement in school-related activities, the research results support the important role parents continue

Table 5
Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
Gender	School performance	7.636	1	7.636	15.055**
	School engagement	1.024	1	1.024	3.609
	Parents' involvement	.009	1	.009	.014
Race	School performance	6.743	3	2.248	4.431**
	School engagement	3.241	3	1.080	3.806**
	Parents' involvement	.519	3	.173	.284
Gender*race	School performance	1.335	3	.445	.877
	School engagement	.887	3	.296	1.042
	Parents' involvement	2.017	3	.672	1.103
Total	School performance	35.891	7	5.127	10.108**
	School engagement	13.148	7	1.878	6.618**
	Parents' involvement	3.314	7	.473	.776

to play in their children's school engagement and learning during middle school years. The study has implications for practice and supports the importance of structures that would facilitate parental involvement in their children's school.

Generally, the parental involvement in school decreases as the students move to higher grades in school, but both parents and schools need to be aware that parental involvement during middle school years will have positive effects on students' school engagement as well as on their school performance. This study explored two important and related questions about the effects of the various forms of parental involvement on various forms of school engagement and the effect of the forms of parental involvement on school performance as measured by grades. Based on nationally representative samples, this study provides strong support in favor of parents' continued support and involvement in school. Students whose parents stay connected to their children and schools are likely to have higher school engagement and better performance.

Schools can encourage parents to remain engaged in many formal and informal ways. For example, schools should promote parents' involvement by including and informing parents of school activities, projects, and co-curricular activities. Schools can also invite parents to participate in activities both curricular and co-curricular, provide them with information on the social and emotional development of their children at this stage, and seek their input and guidance in educational decisions about their children. In sum, schools and parents can create formal and informal ways to have positive and ongoing two-way flow of information and care to support higher school engagement and achievement of young adolescents.

References

Berends, M. (1995). Educational stratification and students' social bonding to school. *British Journal of Sociology of Education, 16,* 327–351.

Bollen, K. A. (1989). *Structural equations with latent variables.* New York: Wiley.

Catsambis, S. (2001). Expanding knowledge of parental involvement in children's secondary education: Connections with high school seniors' academic success. *Social Psychology of Education, 5,* 149–177.

Connell, J. P., Beale-Spencer, M., & Aber, J. L. (1994). Educational risk and resilience in African-American youth: Context, self, action, and outcomes in school. *Child Development, 65,* 493–506.

Connell, J. P., Halpern-Felsher, B. L., Clifford, E., Crinchlow, W., & Usinger, P. (1995). Hanging in there: Behavioral, psychological, and contextual factors affecting whether African-American adolescents stay in high school. *Journal of Adolescent Research, 10,* 41–63.

Davis, K. M., & Lambie, G. W. (2005). Family engagement: A collaborative, systemic approach for middle school counselors. *Professional School Counseling, 9*(2), 144–151.

Downs, A. (2001). It's all in the family: Middle schools share the secrets of parent engagement. *Middle Ground, 4*(3), 10–15.

Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology, 82*(2), 221–234.

Fredericks, J. A., Blumenfeld, P., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109.

Grolnick, W. S., Ryan, R. M., & Deci, E. L. (1991). The inner resources for school achievement: Motivational mediators of children's perceptions of their parents. *Journal of Educational Psychology, 83,* 508–517.

Henderson, A. T., & Berla, N. (1996). *A new generation of evidence: The family is critical to student achievement.* Washington, DC: Center for Law and Education.

Johnston, J. H. (1998). Family involvement models in middle schools. In M. L. Fuller & G. Olsen (Eds.), *Home-school relations: Working successfully with parents and families* (pp. 191–207). Needham Heights, MA: Allyn & Bacon.

Jöreskog, K. G., & Sörbom, D. (2006). LISREL 8.80. Chicago: Scientific Software International.

Keith, T. Z., Keith, P. B., Bickley, P. G., Trivette, P., & Singh, K. (1993). Does parental involvement affect eighth grade student achievement? Structural analysis of national data. *School Psychology Review, 22*(3), 474–496.

Kellaghan, T., Sloane, K., Alvarez, B., & Bloom, B. S. (1993). *The home environment and school learning: Promoting parental involvement in the education of children.* San Francisco: Jossey-Bass.

Kelley, M. S., & Peterson, J. L. (1997). *The National Longitudinal Study of Adolescent Health (Add Health), Waves I & II, 1994–1996: A user's guide to the machine-readable files and documentation* (Data Sets 48–50, 98, A1–A3). Los Altos, CA: Sociometrics Corporation, American Family Data Archive.

Lamborn, S. D., Brown, B. B., Mounts, N. S., & Steinberg, L. (1992). Putting school in perspective: The influence of family, peers, extracurricular participation, and part-time work on academic engagement. In F. M. Newman (Ed.), *Student engagement and achievement in American secondary schools* (pp. 153–181). New York: Teachers College Press.

Mayseless, O., Scharf, M., & Sholt, M. (2003). From authoritative parenting practices to an authoritarian context: Exploring the person-environment fit. *Journal of Research on Adolescence, 13*(4), 427–456.

Newmann, F. M. (1992). Higher-order thinking and prospects for classroom thoughtfulness. In F. M. Newman (Ed.), *Student engagement and achievement in American secondary schools* (pp. 62–91). New York: Teachers College Press.

Newmann, F. M., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In F. M. Newman (Ed.), *Student engagement and achievement in American secondary schools* (pp. 11–39). New York: Teachers College Press.

Pomerantz, E. M., Moorman, E. A., & Litwack, S. D. (2007). The how, whom, and why of parents' involvement in children's academic lives: More is not always better. *Review of Educational Research, 77*(3), 373–410.

Redd, Z., Brooks, J., & McGarvey, A. (2001). *Background for community level work on educational adjustment in adolescence: Reviewing the literature on contributing factors* (Report prepared for the John S. and James L. Knight Foundation). Washington, DC: Child Trends.

Schumacker, R. E., & Lomax, R. G (2004). *A beginner's guide to structural equation modeling* (2nd ed.). Mahwah, NJ: Erlbaum.

Simons-Morton, B. G., & Crump, A. D. (2003). Association of parental involvement and social competence with school adjustment and engagement among sixth graders. *Journal of School Health, 73*(3), 121–126.

Singh, K., Bickley, P. G., Trivette, P., Keith, T. Z., Keith, P. B., & Anderson, E. (1995). The effects of four components of parental involvement on eighth-grade student achievement: Structural analysis of NELS-88 data. *School Psychology Review, 24*(2), 299–317.

Sirin, S. R., & Rogers-Sirin, L. (2004). Exploring school engagement of middle-class African American adolescents. *Youth and Society, 35*(3), 323–340.

Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence, 11,* 1–19.

