



The Impact of Neighborhood Quality on the Relationship Between Parental Involvement and Academic Outcomes of Diverse Adolescents

Nandrea Burrell, McNair Scholar, The Pennsylvania State University

McNair Faculty Research Adviser: Dawn P. Witherspoon, Ph.D.
McCourtney Early Career Professor in Psychology
Associate Professor, Developmental Area

Graduate Student: Emily May, M.S

Department of Psychology
College of the Liberal Arts
The Pennsylvania State University

Abstract

This research is important because it examines factors that is not often considered by many researchers in this field. Demographic disparities in children’s achievements exist at all levels in education and the neighborhood in which the children reside can also have its own influence on the children’s academic outcomes. It is important to look at these factors that may or may not make it possible for these children to continue and complete their educational career. Secondary data analysis of the Families, Adolescents, and Neighborhoods in Context (FAN-C) study, ($N = 140$ African American and Hispanic parent-adolescent dyads) was used to test the following questions: (1) what is the association between home-based and school-based involvement and adolescents’ self-reported grades?, (2) is the magnitude of the association with grades greater for home-based or school-based involvement?, and (3) does the association between parental involvement and grades vary by neighborhood quality? We hypothesized: (1) home and school-based involvement would be positively associated with grades, (2) this association would be stronger for school-based involvement, and (3) the association between parental involvement and grades would be stronger in poorer quality neighborhoods. Results showed that parental involvement did not have an impact on academic performance, but an aspect of neighborhood quality, informal social control, moderated the association of home-based involvement and grades.

Keywords: Parental involvement, academic outcomes, neighborhood quality

Education is one of the greatest opportunities offered by the United States. People see education as a way to access many different opportunities, while some may see it as a way to become equipped with the knowledge necessary to help others. There are, however, disparities in education when comparing minority children to their White counterparts. In 2013, African American students scored an average of 31 points below White students in eighth grade math and 26 points below in eighth grade reading (Morris & Perry, 2016). Also, Hispanic students are about 15% more likely than White students to not have finished high school (Cameron & Heckman, 2001). Another study showed that in 2015, the rates of White young adults receiving a high school diploma or equivalent was higher than the rate of both African American and Hispanic young adults.

Also, in 2017 it was reported that the rate of college enrollment for White young adults were higher than that of African American and Hispanic young adults (Musu-Gillette, De Brey, McFarland, Hussar, Sonnenberg, & Wilkinson-Flicker, 2017). Some of these disparities are due to the fact that a lot of children from minority households do not have the same resources as their White counterparts, necessary to complete their schooling. Another reason for these disparities is that some of these minority children come from households where their parents face barriers such as nonflexible work schedules, transportation problems, and stress from living in a disadvantaged neighborhood, which prevents them from supplying the necessary involvement to their child's education (Hill & Taylor, 2004). This study examined the association between parental involvement in education and adolescents' grades among African American and Hispanic families. In addition, the current study examined whether the quality of the neighborhoods the participants reside in can impact the relationship between parental involvement and grades.

Theoretical & Conceptual Frameworks

The current study was guided by several theories and conceptual frameworks related to the specific contexts in which families (e.g., neighborhood) are embedded as well as a specific parenting practice (i.e., parental involvement). For the neighborhood context, social disorganization theory (Shaw & McKay, 1942) proposes that structural disadvantage within neighborhoods can impact the outcomes of adolescents, ultimately leading to higher youth problems (Kingston et al, 2009). When there is a combination of low social cohesion (shared values and goals) and social control with disadvantage, there are fewer opportunities for the youth to engage in positive social activities, which may lead to increased delinquency (Bowen, 2002) and potentially lower academic performance (Madyun, 2011). Related to social disorganization theory is the collective socialization framework (Wilson, 1987), which proposes that neighbors influence youth through peer interactions, adult role modeling, and parental monitoring (Macartney, 2012). Together, these theories suggest that neighborhood structural disadvantage reduces the likelihood of collective socialization, a positive neighborhood asset, thereby potentially contributing to less desirable youth outcomes.

Guided by these theories, the current study measured neighborhood quality using both positive and negative neighborhood features to understand the interactive effect of neighborhoods and parenting on youth's academic outcomes. A neighborhood that possess high levels of cohesion and control and low levels of problems is considered having good quality, and a neighborhood that possesses low levels of cohesion and control and high levels of problems is classified as poor quality. It is important to consider these constructs because they indicate any disadvantage within the neighborhood and the interactions between the people that reside in that neighborhood. Any type of influence from the neighborhood could also have an impact on how effective parental involvement in education can be on the adolescent's academic outcomes. Neighborhood factors, whether good or bad, are experienced by both the parents and the adolescents and can therefore impact how parents and adolescents interact with each other after experiencing those neighborhood factors. When bad qualities of neighborhoods rise, parents are expected to intervene so that adolescents can remain on a positive path.

Parental involvement is a construct that explains parents' use of different strategies to help better their child's educational outcomes. The most commonly examined and recognized parental involvement strategies are home-based involvement and school-based involvement. Home-based parental involvement includes ways that parents communicate with their child about school, engage with school work, and provide a learning environment at home (Hill &

Tyson, 2009). Activities such as helping with homework, providing a productive space for work to get done, and making sure the child has everything they need to complete their work, are some examples of home-based involvement. School-based parental involvement refers to the parents' participation in school events, governance, and their communication between teachers (Hill & Tyson, 2009). Examples of school-based involvement include attending PTA meetings and communicating with the child's teacher(s) about how the child can better improve. Previous research has shown that home-based involvement was a significant predictor for GPA (Chung, Phillips, Jensen, & Lanier, 2019), and that different types of home-based involvement was positively associated with higher academic achievement (Wilder, 2014). It was also seen that African American and Hispanic parents engaged in less home-based involvement in comparison to White parents (Puccioni, 2018). In regard to school-based parental involvement, average weighted correlation between school-based involvement and academic achievement was stronger than the correlation between home-based involvement and academic achievement (Hill & Tyson, 2009). For African American adolescents, school-based involvement was positively correlated with GPA (Day & Dotterer, 2018). Below, we review relevant literature that explores parent involvement in education, neighborhood quality and African American and Hispanic adolescent's academic performance.

Parental Involvement in Education

For many children, parents are the primary source of advice and help. Parental involvement plays a significant role in children's academic achievement regardless of their grade level (Wilder, 2014) and can yield very positive results. Specifically, for racial-ethnic minority youth, parental involvement is associated with higher achievement (Jeynes, 2005). It is due to these findings that it is believed that family-school relationships and parental involvement have been identified as a way to close the achievement gap between different ethnic groups and maximize the potential of students (Hill & Tyson, 2009).

When children start to get older, it might be harder for parents to express involvement, as the children start becoming self-actualized and are less likely to ask their parents for help (Wilder, 2014). Adolescents would prefer their parents to trust them with the responsibilities of school and would discourage their parents from coming to school (Collins & Laursen, 2004). Although this is true, it is important for parents to try to remain involved in their children's schooling because adolescents whose parents are more involved with their education tend to be more likely to graduate from high school and attend college (Day & Dotterer, 2018). Oftentimes, Hispanic parents find themselves lacking when it comes to parental involvement because they feel they do not have much knowledge to contribute, or there is a language barrier between the parent and the school which prevents them from being willing to involve themselves. African American parents may lack in involvement because bias they may face leads them to mistrust the school and its teachers (Hill & Tyson, 2009). Due to these certain circumstances that may prevent school involvement, it becomes important for parents to be engaged in other ways such as having quality home-based involvement. Some works shows that for African American students, home-based involvement was positively correlated with higher grades (Day & Dotterer, 2018). Another way that home-based parental involvement can serve as key for students is that when parents help with homework, it fosters positive attitudes towards schooling (Balli, Wedman & Demo, 2010). It is important for parents to express interest in their children's studies because parental interest and involvement has proven to be related to higher academic achievement (Bronstein, Ginsburg, & Herrera, 2005).

Researchers and theorists tend to debate whether home-based or school-based involvement has the greatest impact on the academic outcomes of children. Hill & Tyson's (2009) meta-analysis of parental involvement in middle school shows that school-based involvement may have a greater impact than home-based involvement on youth's achievement. Undeniably, parents' school-based involvement is a way to model that school activities are worth the time, which leads to adolescents being more likely to see education as a priority (Day & Dotterer, 2018). Other researchers have found that for children between 15-17 years old, home-based involvement is positively associated with academic achievement, while school-based involvement had no association with academic achievement (Wang and Sheikh-Khalil, 2014). Results tend to depend on the researcher's definition of each type of involvement, and how their questions lead them to analyze the results. For example, Fishel and Ramirez (2005), defined parental involvement in education using Epstein's (1987) typology, which includes communicating with the child's teachers, assisting with the child's learning at home, volunteering or attending events at school, and making decisions regarding the child's academic progression, and this study yielded that these types of involvement were not associated with achievement. Although there are individual benefits of home-based and school-based involvement on adolescents' grades, there is more empirical evidence in support of the claim that school-based involvement has a significant impact on the grades of adolescents.

Neighborhood Quality

While home-based and school-based involvement are related to academic outcomes among adolescents, neighborhood quality may also have implications for the academic success of these youth. Specifically, the context of the neighborhood and resources within those neighborhoods can influence the adolescents in ways that either favor or oppose positive educational outcomes. More affluent neighborhoods are associated with higher achievement in comparison with middle income neighborhoods (Sanbonmatsu, Kling, Duncan, & Brooks-Gunn, 2006), and crime and violence have been found to negatively affect student functioning, performance, and behavior at school (Daly, Shin, Thakral, Selders, & Vera, 2009). With this in mind, it is important to explore neighborhood problems because parents' and adolescents' perceptions of these problems likely matters for youth's academic achievement.

In addition to neighborhood problems, the current study considers informal social control as an aspect of neighborhood quality. By examining informal social control, the influence of members within the neighborhoods can be analyzed as a possible influence on academic outcomes. Hispanic mothers living in neighborhoods with high informal social control engaged in more home-based involvement and resource seeking than mothers living in neighborhoods with less informal social control (Bhargava, Bamaca-Colbert, Witherspoon, Pomerantz, & Robins, 2017). This study shows that how parents perceive their neighborhood environment can impact their involvement in their child's education. If parents perceive the neighborhood as positive, the parents are more capable of adjusting, and in turn are more able to provide a more cognitively stimulating home environment (Mahatmya & Smith, 2017). Informal social control also plays a critical part for adolescents because residents have an easier time supervising youth within the neighborhood, socializing them towards conventional values and preventing them from becoming involved with delinquent peers (Haynie, Silver, & Teasdale, 2006). With the involvement of residents within the neighborhood, adolescents are more directed to staying out of trouble, and with that, hopes of them focusing on completing their education.

There are very limited studies on the influence of neighborhoods on academic achievement. The studies that did examine neighborhood influence showed that neighborhood context and affluence was related to academic achievement. Specifically, immigrant concentration, concentrated affluence, and social capital helped to account for gaps within scores of Hispanic children (Macartney, 2012). Results also showed that trust in neighbors was positively associated with achievement for Hispanic children in native born families (Macartney, 2012). Another study found that for those that had low achievement, they lived in less affluent neighborhoods compared to those that overachieved (Mahatmya & Smith, 2017). There is also limited literature on the effects of neighborhood problems and informal social control on academic achievement.

Current Study

The current study investigates the impact of neighborhood quality on the relationship between parental involvement and African American and Hispanic adolescents' self-reported grades. This research is important because it can help parents to understand how to better help their children in school, while understanding any possible neighborhood influences that can also impact their children. This type of information is especially relevant for racial-ethnic minority families who may perceive barriers to involvement in their youth's education and may also live in lower quality neighborhoods than their White counterparts. The goal of the current study is to answer three questions. (1) what is the association between home-based and school-based involvement on African American and Hispanic adolescent's self-reported grades? (2) is the magnitude of the association between parental involvement and academic outcomes greater for home-based or school-based involvement?, and (3) does the association between home-based and school-based involvement and grades vary by their neighborhood quality? It was hypothesized that there would be a positive association between both home-based and school-based involvement and adolescents' grades. The second hypothesis was that the magnitude of the association between school-based involvement and self-reported grades will be stronger than the association between home-based involvement and grades. The third hypothesis was that the association between home-based and school-based involvement and grades will be stronger within neighborhoods that have high neighborhood problems or low levels of informal social control.

Method

Overview

The current study utilizes data from the Families, Adolescents, and Neighborhoods in Context (FAN-C) study, conducted between 2010 and 2014. This cross-sectional study was conducted in two phases, with the purpose of understanding how neighborhood context is associated with adolescent well-being and family functioning. The study was conducted in Harrisburg, PA, due to its vast racial/ethnic diversity and high proportion of African American and Hispanic families. According to the 2010 census, the racial/ethnic makeup of Harrisburg, was 52.4% Black or African American and 30.7% White. Approximately 18% of the population was Hispanic or of Hispanic ancestry (U.S. Census Bureau, 2010). Participants were recruited from three neighborhoods within the city of Harrisburg. These neighborhoods were selected based on informal interviews with parents and children, community advisory board members and other community stakeholders. Participants were also recruited from two neighborhoods in the surrounding Harrisburg area, which were categorized by a slightly higher median income (\$558-\$4,550 more) and had a different racial/ethnic makeup from the first three neighborhoods. These

neighborhoods were characterized by a lower proportion of African American (38.1%) and Hispanic (14.6%) residents.

Participants

The sample for the current study was taken by combining the samples from both phases of FAN-C ($N_{\text{parent}} = 177$ and $N_{\text{adolescents}} = 205$) and using only $N = 140$ parent-adolescent dyads that identified as African American ($N = 67$, 47.9%) or Hispanic ($N = 73$, 52.1%). The median family income was within the \$20,001-30,000 range, and most parents were natural mothers (67.9%). On average, adolescents were 13 years old ($SD = 1.9$); 42.9% of the youth were males. Of the parent population, 77% had at least a high school diploma. Demographic characteristics of the participants are listed in Table 1.

Procedure

After receiving IRB approval, flyers were posted on community boards located in populous areas within the community to recruit participants for phase I. Agencies and churches in support of the project also informed individuals about the project. Community members who were interested in participating contacted the project hotline where they were screened for eligibility. If the person was eligible to participate, the project coordinator notified them of focus group session dates and times, so the participant could schedule when they could attend. For phase II, Hispanic communities were contacted to help recruit Hispanic individuals. Also, five individuals who were fluent in Spanish were hired to make connections with and recruit the families. Similar to phase I, in phase II, flyers were displayed in hot spots, and they were also posted at events that were organized by Hispanic communities. Interested participants would contact the study hotline, which screened each participant for eligibility. If they were found to be eligible to participate, they were given a date to come in and participate in the study.

Both phases of the study had inclusion and exclusion criteria. Across both phases inclusion criteria were that parents had to be at least 18 years old and the adolescent had to be between the ages of 11 and 17 years old. Additional inclusion criteria for phase I was the participants had to live within one of the five communities that were selected for the study. Exclusion criteria for this phase was that participants had to be able to speak, read, and understand English. For phase II of the study, which focused on Hispanic families, an additional inclusion criterion was that parents had to be able to communicate in Spanish, and adolescents were required to speak in English.

Before study participation, consent and permission had to be given. In phase II, parents were given consent and permission forms in either Spanish or English. For both phases of the study, parents provided permission for their adolescent to participate. The adolescents were read the assent form and signed if they agreed to participate. After consent was given, parents and adolescents were separated into two groups, each having a maximum of 12 members. Questionnaires were completed separately, and the remaining hour was spent discussing topics in those same separate groups. As compensation for their time, parents were given a \$25 gift card, and adolescents were given a \$15 gift card.

Measures

All variables included in this study were used in both phases of FAN-C. Reliability by race/ethnicity is reported in Table 4.

Demographic information. Demographic information was reported by parents and adolescents and is reported. This information includes child age, child gender, parent education, annual family income.

Adolescents reported child gender (coded 1= girls, 2= boy) and their age. Parent education level was coded so that less than high school = 1; high school = 2; some postsecondary education but less than a four-year degree = 3; college graduate (BA/BS) = 4; graduate or professional school = 5. Annual family income was coded on an 11-point scale ranging from 1= less than \$10,000 to 11= greater than \$100,000. Type of residence was coded so that 1= apartment and 2=house. Child grade was not coded and was just inputted as the parents reported it.

Neighborhood quality. *Neighborhood problems.* Neighborhood problems was assessed with an adapted version of the neighborhood problems index (Perkins & Taylor, 1996), which examined perceptions of neighborhood problems by both the youth and the parents. Parents responded to 16 items, and adolescents responded to 10 items (e.g., “how much of a problem is/are burglaries and thefts?”) on a three-point Likert scale: 1 = not a problem; 2 = somewhat of a problem; 3 = a big problem. Both scales demonstrated strong reliability ($\alpha_{\text{parents}} = 0.95$, $\alpha_{\text{youth}} = 0.89$).

Informal social control. Informal social control was measured using the collective efficacy scale (Sampson et al., 1997). This scale examined perceptions of informal social control in their neighborhood. Both parents and youth responded to 5 questions (e.g., “how likely is it that your neighbors would do something, or could be counted on to do something if they saw neighborhood kids skipping school and hanging out on the street corner?”) on a four-point Likert scale: 1 = Not at all likely; 2 = Not very likely; 3 = Somewhat likely; 4 = Very likely. Both scales showed strong reliability ($\alpha_{\text{parents}} = .92$, $\alpha_{\text{youth}} = .92$).

Parental involvement. The measures used to assess home-based and school-based involvement are slightly different for adolescents and parents, as detailed below. These measures were previously developed from focus groups within diverse families. The strategies the caregivers and adolescents used were coded and then items were created for each developmental stage.

Home-based involvement. Parents and adolescents responded to a measure which examined the extent to which parents provided their youth with structure at home. Parents responded to 15 questions (e.g., "my child follows a schedule for completing his or her homework") on a five-point Likert scale: 1 = never; 2 = occasionally; 3 = sometimes; 4=most of the time; 5 = always. The parent-reported scale showed good reliability ($\alpha = .87$). Adolescents responded to 16 similar questions (e.g. “I have a schedule at home for doing my homework”) using the same five-point scale. This adolescent-reported scale also showed good reliability ($\alpha = .90$).

School-based involvement. The parent- reported measure examined the extent to which parents engaged in proactive and preventative communication with their child’s teachers. The scale was created by Hill, Witherspoon, & Teo (2010), and had 10 questions (e.g. “the teachers make suggestions for how my child can improve” and “I ask teachers questions about my child’s homework assignments”) on a five-point Likert scale: 1 = never; 2 = occasionally, 3 = sometimes; 4 = most of the time; 5 = always. The scale had good internal consistency ($\alpha = .93$). The adolescent-reported measure of school-based involvement was created by Hughes & Way (2004). It measured youth’s perception of their parents’ involvement at school. This measure had a total of 11 questions (e.g. “since the start of the school year how often has your parent(s) talked with one of your teachers in person?”) on a four-point Likert scale: 0 = never; 1= sometimes; 2= many times; 3 = always), and showed good reliability ($\alpha = .89$).

Grades. Adolescents responded to questions about their grades in math, science, language arts, and social studies, as reported on their last report card, on an 8-point scale. The items were coded so that 1=55, 2=65-69, 3=70-74, 4=75-79, 5=80-84, 6=85-89, 7=90-94, and 8=95-100, and grades in all four subjects were averaged. The scale showed good reliability ($\alpha=.76$).

Data Analysis Plan

After the variables were selected, exploratory factor analysis (EFA) and reliability was used to construct the scales and examine internal consistency. Descriptive statistics were separated by parents and adolescents, and t-tests were used to test for mean differences by race/ethnicity. Bivariate correlations were run to examine associations between the variables. Regression analyses were conducted using SPSS to test study hypotheses. All models were separated by parent-reported and adolescent-reported predictor variables, and all models include covariates of child gender, child age, parents' education, and family income. Parental involvement and neighborhood variables were entered in the first step of the regression to examine the main effects. Interactions were then added to the models. Due to a high level of collinearity among the parent-reported interaction terms, the interactions were entered in two separate models. Specifically, one model examined the interactions between neighborhood problems and parental involvement variables, and the other model examined the interactions between informal social control and parental involvement variables. For interactions that were statistically significant, simple slope analyses were conducted using the PROCESS macro in SPSS.

Results

Preliminary Results

Descriptive statistics are shown in Tables 2, 3, and 4. Mean levels of study variables were compared for Hispanic and African American participants using *t*-tests (and results are displayed in Tables 2 and 3). Parent-reported models showed significant differences for reports of informal social control ($t(138) = 1.73, p < .10$). Hispanic parents reported higher levels of informal social control ($M = 2.61, SD = .98$) than African American parents ($M = 2.31, SD = 1.04$). For adolescent-reported models, reports of school-based involvement were significantly different ($t(134) = 2.32, p < .05$). African Americans reported higher levels ($M = 1.27, SD = .82$) of school-based involvement Hispanic adolescents ($M = .98, SD = .63$). Correlations are displayed in Table 5.

Substantive Analyses

The regression analyses are shown in Table 6. Parent reported variables were inconsistent with hypothesis, as the regression showed that home-based and school-based involvement were not significantly associated with grades. The interaction of neighborhood problems and informal social control were entered in separate models. Parent-reported neighborhood problems did not moderate the effect of home-based or school-based involvement on grades. Similarly, informal social control, did not moderate the effect of school-based or home-based involvement on grades.

For the adolescent-reported models, results showed that there was no association between either home-based or school-based involvement and academic outcomes, also contrary to hypotheses. To examine the moderation by neighborhood variables, interactions were entered into the models, starting with neighborhood problems. As with results for parents, neighborhood problems did not moderate the association between school-based involvement and grades for

adolescent report. However, adolescent-reported neighborhood problems did moderate the association between home-based involvement and grades ($B = -.96, SE = .24, p < .10$). This marginally significant interaction was explored by graphing the simple slopes (displayed in Figure 2). Although the interaction was not significant, the figure showed that for neighborhoods with low levels of problems, parents' home-based involvement was positively associated with grades. Next, interactions between informal social control and parental involvement variables were entered in a separate model. Informal social control moderated the association between home-based involvement and grades ($B = .24, SE = .03, p < .05$). Simple slope analysis was then used to further explore this interaction, displayed in Figure 2. Analyses showed that for neighborhoods with high informal social control, as home-based involvement increased, grades increased as well ($B = .48, SE = .26, p < .10$). For neighborhoods with average and low informal social control, adolescent reported of parents' home-based involvement were not associated with grades.

Discussion

The current study examined the association between parental involvement in education and adolescents' academic performance, as well as the impact of neighborhood quality on the relationship between parental involvement and the grades of adolescents. First, it was hypothesized that there would be a positive association between home-based and school-based involvement with academic performance. Results showed that the effect of home-based and school-based involvement, as reported by parents, were not associated with grades. Similarly, for adolescent report, regression analysis showed that the effect of home-based and school-based involvement had no significant effect on grades. Therefore, hypothesis 1 was not supported. It was also hypothesized that the association between parental involvement and academic performance would be greater for school-based involvement. Since the data did not support the first hypothesis, a conclusion could not be drawn about whether home-based or school-based involvement had a stronger association with grades. These findings reflected the uncertainty shown in the literature presented previously. Participants, measures, and frameworks may be similar across the many different studies, but there are underlying factors that play a role in how these characteristics interact with each other that impact the significance of the expected results. Although it is not unlikely that there would be unsupported data, it is still surprising, nonetheless.

Finally, it was hypothesized that for poor quality neighborhoods (i.e. neighborhoods with low informal social control and high neighborhood problems), the association between parental involvement and academic outcomes would be stronger than the association within affluent neighborhoods. For adolescent report, results showed that informal social control moderated the effect of parents' home-based involvement and grades, but this moderation was inconsistent with hypotheses. Specifically, in neighborhoods that had *high* informal social control, home-based involvement was positively associated with grades. It can then be perceived that neighbors have some impact on either how adolescents think and approach education, and/or how involved the adolescents perceive their parents to be in their education. This is consistent with the collective socialization framework (Wilson, 1987) because it is showing that these neighborhoods, specifically its residents, can influence the youth, and when these influences are positive, can yield positive results. Additionally, the interaction between adolescent report of neighborhood problems and home-based involvement was marginally significant. Within neighborhoods that had high levels of problems, grades would decrease as home-based involvement increased, and for neighborhoods with low levels of problems, grades would increase as home-based

involvement decreased. These findings support social disorganization theory (Shaw & McKay, 1942), in that these neighborhoods with high levels of problems may be impacting the adolescents in a way where parental involvement cannot counter the impact and therefore the adolescents' education takes a toll. For parent-reported variables, neighborhood variables did not moderate the associations between parent involvement and grades. This was expected because parents are less likely to be influenced by their environment when it comes to parenting their child. It is expected that parents are already aware of the neighborhood environment since they are the ones who choose where their family will live, so it is not unusual that neighborhood problems show to not have any significance for parents. Also, some parents rely on their instincts when raising their child, so working with their neighbors for the benefit of their child may not be an idea that they consider, which could explain why informal social control also showed no significance.

Limitations and Future Directions

One limitation of the current study was the use of cross-sectional data, which does not account for changes in contextual factors (i.e. change in neighborhood environment overtime). The data showed that the moderation of neighborhood problems on the relationship between parental involvement and academic outcomes had no significant effect. This could be because having lived in a neighborhood for a certain amount of time, the residents become accustomed to the environment, and it will no longer have any significant impact on them. For future examination, increasing the sample size can improve the chances of getting significant results.

Conclusion

Although there were some limitations, this study gave insight into how neighborhood qualities can impact the relationship between the involvement of parents in their child's education, and the academic outcomes of those children. Parents can use this information to better understand not only how their involvement can impact their child, but also encourage them to use their fellow neighborhood residents as additional help for their child. The adjustment of youths depends on both parenting process and the structural characteristics of neighborhoods (Beyers et al., 2009), which this study highlighted. Families working together with neighbors can not only prove to have a worthy impact on academic outcomes but can also further develop cohesion within the community, ultimately creating even more advantages for its members.

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Table 1 Demographic Variables

	Entire Sample N=140	African American Sample N=67	Hispanic Sample N=73
<hr/>			
Parent Education			
No formal education	1.4%		2.7%
Grade School	8.6%	1.5%	15.1%
Junior High School	6.4%	3%	9.6%
High School	40%	41.8%	38.4%
Vocational School	10%	11.9%	8.2%
1-3 years of college/no degree	10%	14.9%	5.5%
Associates Degree	6.4%	9%	4.1%
College Graduate (BA/BS)	7.1 %	6%	8.2%
Graduate or Professional School (MA, MS, MBA)	2.1%	3%	1.4%

Graduate or Professional School (PhD, JD, MD, DO, DDS, etc.)	6.4%	7.5%	5.5%
Missing	5.9%	5.9%	3.6%
Family Income			
Less than 10,000	30%	28.4%	31.5%
\$10,001-20,000	17.9%	11.9%	23.3%
\$20,001-30,000	10%	13.4%	6.8%
\$30,001-40,000	8.6%	16.4%	1.4%
\$40,001-50,000	4.3%	7.5%	1.4%
\$50,001-60,000	0.7%		1.4%
\$60,001-70,000	2.9%	4.5%	1.4%
\$70,001-80,000	1.4%	3.0%	--
\$80,001-90,000	0.7%	--	1.4%
\$90,001-100,000	0.7%	--	1.4%
Greater than \$100,000	0.7%	1.5%	1.4%

Family Residence			
Apartment	35.7%	31.3%	39.7%
House	62.1%	64.2%	60.3%
Child Grade			
4 th grade	0.7%	--	1.4%
5 th grade	9.3%	5.9%	12.7%
6 th grade	14.3%	19.1%	9.9%
7 th grade	19.3%	13.2%	23.9%
8 th grade	12.1%	14.7%	9.9%
9 th grade	10.7%	13.2%	8.5%
10 th grade	7.9%	10.3%	5.6%
11 th grade	6.4%	7.4%	5.6%
12 th grade	7.9%	10.3%	5.6%
Child Gender			
Girl	54.3%	55.9%	52.1%
Boy	42.9%	39.7%	46.5%
Missing	2.9%	4.4%	1.4%
Marital Status			
Not Married or Cohabiting	42.9%	58.2%	28.2%
Married/Cohabiting	32.1%	23.9%	39.4%

Widowed	1.4%	1.5%	1.4%
Separated	10.7%	3%	18.3%
Divorces	11.4%	10.8%	12.7%

Table 2 Descriptive Statistics for Adolescent Reported Variables by Race/Ethnicity

	Adolescent Ethnicity	Mean (SD)	<i>t</i> (df)
Home-Based Involvement	African American	3.06 (.99)	1.26 (127)
	Hispanic	2.84 (.97)	
School-Based Involvement	African American	1.27 (.82)	2.32 (134)*
	Hispanic	.98 (.63)	
Neighborhood Problems	African American	1.92 (.57)	.71 (133)
	Hispanic	1.85 (.58)	
Informal Social Control	African American	2.32 (1.10)	1.44 (132)
	Hispanic	2.05 (1.03)	
Grades	African American	5.82 (1.28)	-.83 (133)
	Hispanic	6.02 (1.49)	

*p<.05

Table 3 Descriptive Statistics for Parent Reported Variables by Race/Ethnicity

	Parent Ethnicity	Mean (SD)	<i>t</i> (df)
Home-Based Involvement	African American	3.81 (.72)	-.73 (132)
	Hispanic	3.91 (.81)	
School-Based Involvement	African American	3.36 (1.06)	-1.18 (133)
	Hispanic	3.59 (1.12)	
Neighborhood Problems	African American	1.86 (.55)	-1.03 (138)
	Hispanic	1.97 (.64)	
Informal Social Control	African American	2.31 (1.04)	-1.73 (138) [†]
	Hispanic	2.61 (.98)	

[†]p<.10

Table 4 Cronbach alphas by race/ethnicity, mean, and standard deviations

Variables	Adolescent	African American Adolescents	Hispanic Adolescents	Parent	African American Parents	Hispanic Parents
	M (SD)	α	α	M (SD)	α	α
Home-Based Involvement	2.94 (.98)	.89	.90	3.86 (.76)	.84	.90
School-Based Involvement	1.12 (.74)	.92	.91	3.48 (1.10)	.92	.94
Informal Social Control	1.88 (.58)	.94	.89	2.47 (1.02)	.91	.92
Neighborhood Problems	2.19 (1.08)	.88	.90	1.92 (.60)	.94	.95
Grades	5.93 (1.39)	.74	.78			

Table 5 Correlations for Parents and Adolescents

	Child Age	Child Gender	Parent Education	Family Income	Home-Based Involvement	School-Based Involvement	Informal Social Control	Neighborhood Problems	Grades
Child Age	1	-.13	.18*	.16	-.30**	-.28**	-.03	-.30**	-.21*
Child Gender	-.13	1	-.11	-.21*	-.06	.03	.002	.03	-.08
Parent Education	.18*	-.11	1	.36**	.03	.01	.01	-.13	-.06
Family Income	.16	-.21*	.36**	1	-.01	.02	.08	-.20	-.06
Home-Based Involvement	-.28**	.07	-.09	-.11	1	.61**	.03	.18*	.21*
School-Based Involvement	.03	-.04	-.09	-.05	.36**	1	.02	.22	.25
Informal Social Control	.03	-.02	-.05	-.05	-.001	.08	1	.01	.09
Neighborhood Problems	-.07	.04	-.06	-.30**	.11	-.06	.17*	1	.13
Grades	-.21*	-.08	-.06	-.06	.08	-.04	.11	.02	1

*p<.05, ** p<.001

Note: Parents are reported below the diagonal and adolescents are reported above the diagonal

Table 6 Regression Analyses

	Parent N=140	Adolescent N=140
Main Effect Model	β (SE)	β (SE)
Child Age	-.20 (.08)	-.13 (.08)
Child Gender	-.12 (.29)	-.12 (.29)
Family Income	-.01 (.16)	-.05 (.07)
Parent Education	-.05 (.08)	-.02 (.15)
Home-Based Involvement	.05 (.21)	.04 (.18)
School-Based Involvement	-.06 (.14)	.19 (.24)
Neighborhood Problems	-.03 (.25)	.03 (.26)
Informal Social Control	.12 (.14)	.08 (.13)
Neighborhood Problem Interactions^a		
Home-Based x Neighborhood Problems	-.49 (.31)	-.96 (.24) [†]
School- Based x Neighborhood Problems	-.33 (.23)	.37 (.31)
Informal Social Control Interactions^a		
Home-Based x Informal Social Control	.05 (.18)	.24 (.03)**
School-Based x Informal Social Control	.54 (.14)	-.38 (.20)

^a All main effects and interactions were also entered in the covariate models

[†]p<.10, **p<.05

Figure 1. Simple Slope Plot for Home-Based Involvement x Informal Social Control

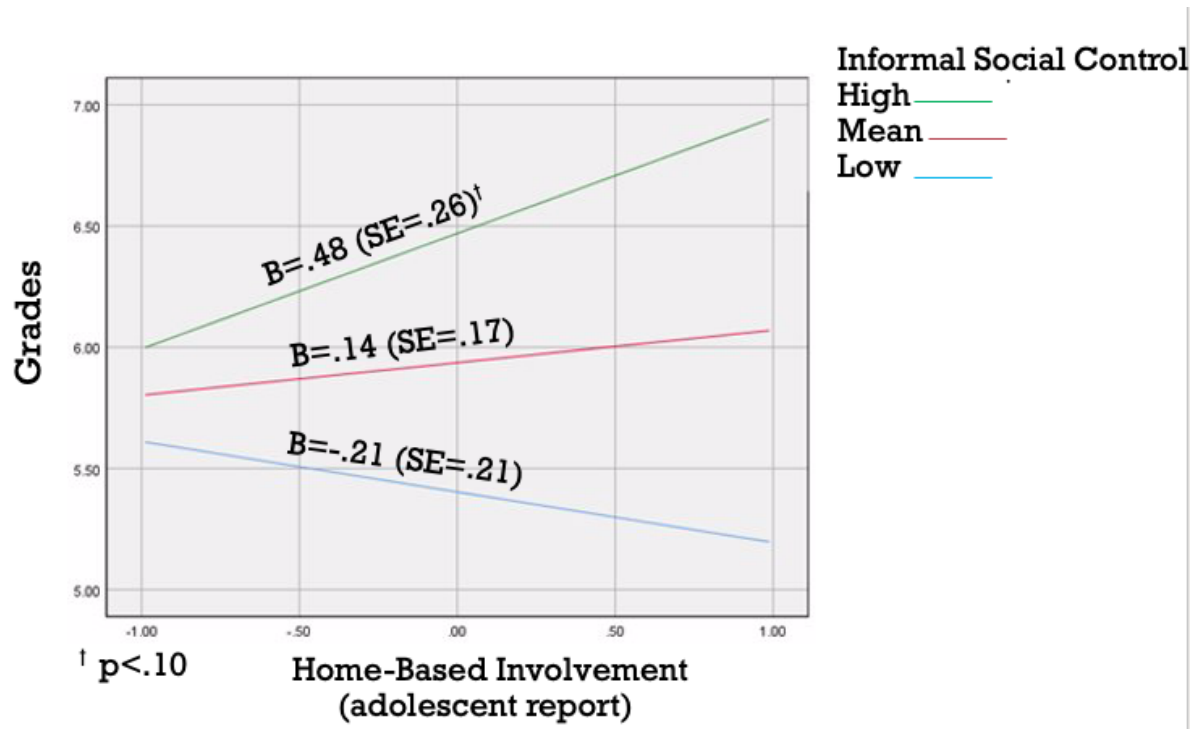


Figure 2. Simple Slope Plot for Home-Based Involvement x Neighborhood Problems

