Social capital for adolescents from low-income families: A means to improve academic achievement and mental health?

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Abstract

Although social capital has been popularized in recent years as a wholly beneficial construct that defines the degree to which a person has networks and relationships of trust, few researchers have investigated social capital’s impact on low-income populations. The current study examined the impact of social capital measures in the school and home environment for low-income adolescents’ academic achievement and psychological wellbeing for respondents from A three-city study: Welfare, children, and families (Cherlin, 1999). The sample was composed of predominantly low-income Latino and African-American mother-child pairs. Social capital was operationalized using a model developed by the United Kingdom’s Office of National Statistics. Results revealed few benefits of social capital for low-income youth. Limitations of the study and implications of the lack of support for social capital’s influence on this group are discussed in light of recent academic and governmental interest in the influential power of social capital.
With the decline of social mobility since the 1970s in the United States, poor children will likely become poor adults, regardless of any other positive resources or influences in their lives (Hungerford, 2011). To suggest that the amount of a family’s wealth is the only factor that contributes to childhood outcomes and adulthood poverty would not be telling the whole story. Structural inequity connected to social class such as racism, education, healthcare, and other socio-environmental differences make it difficult for people living in poverty to reach beyond the social status in which they grew up. Another factor that has been popularized in recent years is social capital. Social capital, as defined by networks and relationships of trust and reciprocity, has varying degrees of positive outcomes for different groups within the US (Portes, 2002; Hero, 2003). The current study investigates the effects that social capital may have on improving the academic achievement and mental health outcomes for low-income adolescents.

Social capital is now a widely used construct in a variety of fields, but its current origins lie in the social sciences. Pierre Bourdieu was the first modern-day sociologist to use the term in his critical analysis of society in the 1980s (Portes & Landolt, 2000). Bourdieu conceptualized social capital as relationships built by people and families to use for later benefit (Portes & Landolt, 2000). Similarly, Coleman (1990) defined social capital as benefits derived from relationships between individuals and groups, differentiating social capital from financial, physical, and human capital. Coleman also discussed social capital in terms of mezzo-level interactions between people, families, and communities, highlighting social capital’s influence on the wellbeing of youth (Coleman, 1990, 1988). Coleman and Hoffer’s (1987) work showed the importance of family social capital on academic achievement in high school students for their study, High School and Beyond. Furthermore, political scientist Robert Putnam (2000) vividly changed the concept of social capital in defining it as a measure of communities, states, and nations in his text Bowling Alone. Rather than measuring social capital as an individual construct, Putnam compared different amounts of social capital between communities. Along with measures of social trust and networks, Putnam (2000) focused on measures of civic
engagement such as community organizations, volunteering, and voting. Putnam (2000) also differentiated bonding and bridging social capital, suggesting that bonding social capital was inherent in friend and familial relationships while bridging social capital defined relationships between different social groups. Whereas bonding social capital is important in “getting by,” bridging social capital helps in “getting ahead” (Putnam, 2000, p. 22).

Given all of the positive outcomes explained by social capital, examining differing amounts of social capital established in childhood may help explain the inequities that are likely to continue into adulthood. Youth with more social capital are expected to have better outcomes than youth with less social capital. Social capital, then, may be particularly helpful in developing more positive outcomes amongst adolescents experiencing poverty. For the vast majority of adolescents in the US, the home and school are the two primary environments for development; therefore, establishing measures of social capital in these settings may help identify the genesis of inequity explained in differing amounts of adolescents’ social capital. The current study focuses on social capital among low-income adolescents, as social capital is particularly relevant to addressing psychosocial inequity. Symptoms of psychological illness and academic achievement were used as two long-established outcomes of psychosocial development to measure the difference between adolescents with high or low levels of social capital.

Although research regarding social capital has been widely used in describing various forms of social support, networking, and social cohesion, as social capital has gained in popularity, it has also become increasing important to have a governing body to operationally define social capital. This creates greater continuity among researchers and allows researchers and policy makers to make stronger claims and predictions about the potential effects of social capital. Therefore, to encourage external validity, and to maintain the explanatory power of social capital, the current study relies heavily on the definition of social capital provided by the Office for National Statistics (ONS) in the United Kingdom and the Organisation for Economic Co-operation and Development (OECD). The OECD defines social capital as “networks and
shared norms, values and understandings that facilitate co-operation within or among groups” (Cote & Healy, 2001, p. 41). The ONS also differentiates between bonding, bridging, and linking social capital. Following Putnam’s definition of bonding and bridging social capital, the ONS defines bonding social capital as bonds between family members or between members of the same ethnic group, and bridging social capital as “more cross-cutting ties” (Harper, 2002, p. 3). Linking social capital, on the other hand, are relationships that connect groups at various levels in the hierarchy of power within a society. While the concept of linking social capital was developed to consider the growth of developing countries, it may also be useful in the discussion of social mobility for low-income adolescents.

Despite the somewhat ambiguous definition of social capital across various studies, I build a framework of references using research from a variety of disciplines in order to gain an understanding of social capital among adolescents. In particular, I examine the effects of social capital measures in the school and the home environments on low-income adolescents’ academic achievement and psychological well-being and the differences therein between racial groups. While some researchers have only cited positive influences of social capital, others have criticized social capital as a construct that is over-used and over-celebrated for being such a weakly defined concept that fails to show positive outcomes for some minority groups (Portes, 2000; Hero, 2003). In the following section, different aspects of social capital are considered in relation to these psychosocial measures of wellbeing for adolescents.

**Background Information**

**Socioeconomic Status and Social Capital**

Adolescents who lack financial resources are also more likely to face other challenges in other areas of life. Low socio-economic status (SES) in youth correlates with higher levels of mental illness and maladaptive functioning (Bolger 1995, Brooks-Gunn & Duncan 1997). Low levels of financial capital also correlate with low levels of social capital and human capital within familial, school, and neighborhood contexts (Perna & Titus, 2005; Parcel & Dufur, 2001a;
Ainsworth, 2002). Children of low SES attend schools with fewer financial resources and are less likely to do well in school than their counterparts with more financial resources (Brooks-Gunn & Duncan, 1997). The lines between low and middle SES are also likely to fall among racial lines; while the percentage of White children living in poverty in the United States in 2010 was 12.4%, 38.2% of Black children and 35.0% of Hispanic children were living in poverty (National Poverty Center, 2012). Looking specifically at social capital and academic achievement among second-generation immigrant children, Portes (2000) found that SES was the most influential factor in predicting children’s academic achievement, and social capital was unimportant. Additionally, while being Chinese or Korean predicted better academic achievement, being of Mexican decent predicted worse academic achievement. Portes associated the disparities to differences in cultural capital adopted between the Asian groups and the Mexican youth.

The role of social capital in eradicating poverty has also been the topic of international discussion both for developing countries and the developed world. While some institutions such as the World Bank have solicited social capital as a missing factor towards increased economic development, others have provided a harsh criticism of this position, suggesting that the emphasis of social capital is employed to deter the discussion of development from inequalities established through mechanisms of power and class (Harris, 2002). In agreement, Oyen (2002) pointed out that the poor have different networks from the non-poor, and are not likely to be allowed to enter into the non-poors’ networks, arguing towards the position that social capital cannot be used for the reduction of poverty. Woolcock (2002), who is incidentally employed by the World Bank, is not as conclusive of social capital’s lack of influence on poverty. Woolcock (2002) suggests that policy makers should focus on, “activities of the poor [that] not only ‘reach out,’ but are also ‘scaled up’ ” (p. 26). Woolcock speaks to the concept of linking social capital, suggesting that people living in poverty need relationships with people of a higher SES if social capital is to help them come out of poverty. While many impoverished communities may have wonderful support systems and networks, only vertical social capital will enhance their upward
social mobility.

**Academic Achievement and Social Capital**

When examining social capital at the community level, some researchers claim that after poverty, social capital is the greatest predictor of student achievement (Putnam, 2000). Looking at statewide data, Putnam (2000) found that social capital is correlated with student test scores and higher retention rates in elementary, middle, and high school. Putnam’s findings are particularly relevant considering that schools with higher portions of Latino and African-American students are negatively associated with later academic achievement (Goldsmith, 2009). Contending with Putnam’s conclusions, when examining individual measures of social capital Dunham and Wilson (2007) found that non-White students do have as many positive outcomes with more social capital compared to their White counterparts. Similarly, social capital acts as a better buffer against dropping out of school for White and Asian students compared to Latino and African-American students (Dunham & Wilson, 2007). Dunham and Wilson (2007) also showed that the amount of social capital each student had depended largely on the student’s social class. Kao and Rutherford (2007) also found that academic achievement and social capital varied by racial group and immigrant minority status. Parcel, Dufur, and Zito (2010) also pointed out that research regarding social capital and adolescent wellbeing has not examined differences between racial groups. Adding to complications, measures of social capital for children have been under-developed compared to measures produced for adults (McKenzie, 2006a).

Other research has focused more on racial differences and students’ orientation towards school. In looking at attachment and engagement in a nationally representative sample, Johnson, Crosnoe and Elder (2001) found that the students’ race and the racial makeup of the school were both influential in student engagement and attachment. Evidence for the increased academic achievement for students whose schools meet their racial characteristic provides more evidence for the influence of bonding social capital. Ream (2005) suggested that differences in peer social capital were helpful in explaining the achievement gap between Latino and non-Latino students,
even after controlling for SES and academic background. Johnson et. al. (2001) also pointed out the limitations of the school environment in affecting a student’s engagement and attachment, but reasoned that schools “represent a prime entry point for intervention” (p. 336). Racial differences are also found among students’ likelihood of attending college. In a nationally representative sample, Perna and Titus (2005) found that for African-American students parent-student discussions relating to school were less influential in the student’s chances of enrolling in college, whereas parent-initiated contact with the school regarding the student’s academic problems were more influential. African-American families were also more engaged in discussions with the child and the school compared to Asian, Latino, or White families (Perna & Titus, 2005). Overall however, African-American and Latino students had fewer resources at home and fewer school resources that are likely to promote college enrollment, including economic, human, and social capital (Perna & Titus, 2005).

**Mental Health and Social Capital**

Research examining the effects of social capital on mental health are more varied compared to the strong associations found between social capital and academic achievement (Furtenburg & Hughes, 1995). Indeed, given that the origins of the discussion regarding youth and social capital were based on academic achievement, research into this outcome far outweighs the research concerning the effects of social capital and mental health. While research does show significant relationships between some measures of individual social capital, social capital has proven to be a very slippery concept for researchers attempting to find links between social capital and mental health (Giordano & Lindstrom, 2011). Some of the weak associations between social capital and mental health, however, may be associated with the varying ways that social capital has been defined across various studies (De Silva, McKenzie, Harpham & Huttly, 2005). Others caution researchers from suggesting that there is a causal relationship between social capital and mental health, suggesting that only an associative relationship between the constructs has been established (McKenzie, 2006a; Henderson & Whiteford, 2003).
Additionally, much of the research surrounding social capital and mental health has focused only on cognitive measures (e.g., reciprocity and trust) of social capital or social capital at the neighborhood level (Almedom, 2005).

In a meta-analysis, De Silva, McKenzie, Harpham, and Huttly (2005) found that there is an inverse relationship between cognitive measures of social capital and common mental disorders and child mental illness. Similarly, findings show that social capital measured at the cognitive and community level was moderately associated with psychological distress (Phongsavan, Chey, Brooks, & Silove, 2006; De Silva, 2006). Looking specifically at major depression, Fujiwara and Kawachi (2008) found that cognitive social capital associated with the disorder, but measures of structural social capital (i.e. networks) were not significant. On the other hand, Giordano and Lindstrom (2011) found that individual factors of collective efficacy were significant in predicting one’s psychological health, along with measures of interpersonal trust and social participation, but SES and social support were not significant in their UK population. Specifically examining major depression and social capital measures for adolescents, O’Connor et. al. (2011) found that alienation from peers predicted higher levels of depression whereas good communication with peers associated with reduced symptoms. Examining both mental health and educational outcomes, Rothon, Goodwin, and Stansfeld (2012) showed that family social capital was significantly associated with mental health and educational outcomes for a nationally representative sample of adolescents in Britain, but social capital from community settings (including parent social networks, adolescent’s sociability, and extra-curricular activities) was not a significant predictor of mental health. By comparison, some extra-curricular activities and parental involvement in school increased adolescent educational attainment. Thus, it seems that while outcomes of neighborhood social capital and measures of community involvement have been mixed in predicting mental health, looking at individual measures of family social capital shows significant associations with adolescents’ psychological wellbeing.
Although the results of various studies have mixed conclusions, overall it seems that there are no significant difference between the prevalence of mental illness by race and ethnicity with the exception of the prevalence of mental illness of people in high-need subgroups such as people living in poverty (Department of Health and Human Services, 2001). However, minority racial groups in the US have higher levels of mental illness because they are more likely to have lower SES, which leads to a greater likelihood of developing a mental illness. As a point of reference, the National Health and Nutrition Examination Survey reported 7.2 percent of Mexican-Americans, 9.7 percent of Blacks, and 6.2 percent of Whites with depression (Reeves et al., 2011). Indeed, some researchers contend that “in poor urban areas, aspects of social capital may have an impact on mental health but factors external to communities” have more dominant effects on the mental health of the population (McKenzie, 2006b, p. 155). The adverse mental health of racial minorities also persists over a longer period of time compared to other racial groups likely because they lack health care or do not receive the same quality of care as people with higher levels of SES (Breslau et. al., 2004). Culture also seems to affect the prevalence of mental disorders in different populations (Williams, Costa, & Leavell, 2009). Racial groups, do, however, vary by the type of mental illness that is present within each population (Breslau et. al., 2005; Williams, Costa, & Leavell, 2009). Breslau et. al. (2005) suggested that perhaps there are protective factors originating in childhood that buffer internalizing psychological disorders. While SES mediates the racial differences in the prevalence of mental illness in the United States, the finding that different racial groups have higher levels of different types of disorders suggests that there may be other mediating factors contributing to the different levels of psychological illness between different racial groups, such as social capital.

**Social Capital in the School and the Home Environment**

While most research regarding social capital and outcomes for youth has focused on different sources or levels of social capital, other researchers have begun to identify the outcomes that are produced by the environments in which the social capital occurs. Of particular
importance to children and adolescents are the home and the school environments. Whereas school social capital is defined by the relationship between parents and schools that support education and social adjustment (bridging social capital), family social capital measures the bond between parents and children that promotes child socialization (Parcel & Dufur, 2001a). In investigating academic outcomes and social adjustment, Parcel and Dufur (2001a; 2001b) found that there is an interaction between family and school social capital, but family social capital ultimately has more influence over academic achievement and social adjustment compared to school social capital. Further research has reiterated the influence of family social capital compared to social capital measures found in the school environment (Parcel, Dufur, & Zito, 2010; Ferguson, 2006). Following the work of Parcel and Dufur (2001a; 2001b), Crosnoe (2004) suggested that family social capital boosts the social capital available or used in the school environment. Additionally, in the absence of family social capital, school social capital in the form of strong student-teacher relationships acts as a compensator.

**Introduction to the Current Research**

While past research has found significant relationships between social capital and youth within nationally representative samples and between different racial groups, few studies have focused on the effects of social capital specifically for lower-class youth. Thus, broadly speaking, this research seeks to find out if social capital contributes to better outcomes for youth living in poverty. Following the research done by Parcel and Dufur (2001a, 2001b) and Rothon and Goodwin (2011), I examine the relationship between family social capital and school social capital as it affects low-income adolescents’ academic achievement and symptoms of psychological illness using data from the Welfare, children, and families: A three-city study (Cherlin, 1999). Additionally, I will examine the differences in the uses of social capital to influence academic achievement and adverse mental health between the African-American and Latino populations. Specifically, my hypotheses follow:

- **H1:** Family social capital is a better indicator of adolescent’s academic achievement
compared to social capital found in the school environment.

- **H₂**: Individual (cognitive) home-based measures of social capital are better buffers from symptoms of psychological illness in adolescents compared to group (non-cognitive) measures.

- **H₃**: There will be significant differences between the types of social capital that significantly affect academic achievement and psychological illness between Latino and African-American adolescents.

**Methods**

**Data**

The data were taken from Welfare, children, and families: A three-city study surveying low-income families in Boston, Chicago, and San Antonio over the course of three waves in seven years (Cherlin, 1999). The samples were collected using a multistage stratified probability sampling method where the head of the household was either female- or couple-headed and had children ranging in age either zero to four years or 10 to 14 at the beginning of the study. Additionally, each of the households lived at least 200 percent below the poverty line and primarily belonged to African-American or Latino minority groups. In the first wave of the survey in 1999, there were 2,402 child-caregiver pairs, and 1,944 pairs in the final wave study in 2005/2006. The study surveyed children and caregivers (predominantly mothers) recording data about welfare, family life, work experiences, and child development.

Of particular interest to this study was the access to social capital reported by mothers and adolescents who were 15 to 18 years old at the third wave of the study (meaning they were 10 to 14 at wave two). Responses were taken from the second and the third wave of the study to measure differences in social capital across time. The social capital measures and control variables were taken from data in the second wave of the study, and the dependent variables were taken from the third wave. Only the cases with information from both the mother and the child respondents in both the second and third wave of the study could be used. Additionally, only
youth who were 15 to 18 years old at wave three were included in the dataset, leaving 676 cases. Further cases were dropped that were missing the dependent variables and independent variables pairwise, leaving 600 cases in the Brief Symptoms Inventory models and 564 cases in the academic achievement models.

**Measures**

**Social capital.** Following the operational definition of social capital provided by the UK’s Office of National Statistics, the variables included in this study are conceptualized under the five following dimensions: social participation, social networks and social support, reciprocity and trust, civic participation, and views of the local area (Harper, 2002). While social participation as well as social networks and support are considered individual forms of social capital, reciprocity and trust, civic participation, and views of the local area are group dimensions of social capital.

Each construct would ideally be represented in the family and the school environment; however, some concepts that would have been ideal to include in the models are absent due to the lack of available data from the study. For the home environment, only four out of the five dimensions of social capital are measured, missing a civic participation measure. With this exception, the social capital measures for the home environment are church attendance, mother/child trust and communication scale, mother's social support, and perceptions of neighborhood collective efficacy. In the school environment a variable of reciprocity and trust was also not available in the data. Additionally, a variable of civic participation did not seem relevant to the school environment. Thus, the final measures of social capital for the school environment include participation in extracurricular activities, a positive friends scale, and the mother's perception of school safety.

**Social participation.** Social participation is defined by involvement in social groups, both the frequency and intensity of the involvement, and may include voluntary or religious activities (Cote & Healy, 2001). Church attendance measures for adolescents were collapsed into
three categories: (1) almost never, (2) once or several times a month, or (3) once or more during the week. The extracurricular activities measure was created by taking a mean for participation in different activities, including “elected class/club officer,” “received award/letter for activities,” “participated on sports teams,” and “participated in afterschool programs.”

Social networks and support. Mothers were asked a range of questions to understand the amount of social support available to each of them. A mean was created from the following questions: “When you need someone to listen to your problems when you’re feeling low are there…,” “When you need someone to take care of your child(ren) when you aren’t around are there…” and, “When you need help with small favors, are there…” Mothers chose either (1) “enough people you can count on,” (2) “too few,” or (3) “no one you can count on.” The positive friends scale variable was created by the original investigators by adding together six different variables in order to measure positive influence of school friends. The range of the composite variable was 0-6.

Trust and reciprocity. The mother-child trust and communication scale was created by the original investigators by taking the mean of six questions asking the child about their relationship with their mother. For example, “my relative accepts me as I am,” and, “I can tell my relative about my problems and troubles.”

Views of the local area. Collective efficacy has largely been used as a measure of community social capital; however, in this study questions of neighborhood social support are taken as individual measures reported by the caregiver. The collective efficacy scale, created by the original investigators, follows a similar scale produced by Sampson et. al. (1997). Higher scores reflect greater collective efficacy. Mothers reported the safety of their child’s school following the question, “How much do you agree or disagree that child’s school is a safe place?”

Control variables. The variables included in this section were incorporated into the models for several reasons: to maintain validity of the other variables, to measure differences between the waves, and to look at differences between social capital and different demographic
groups. The mother’s education controls for some aspects of SES, while the Woodcock-Johnson scale and the father living in household variables account for cognitive abilities and greater propensity for social capital through parental channels, respectively. The race variable (RACEC32) was created by the original researchers (Cherlin, 1999). In the models that include all races, dummy variables were created for Black (0,1) and Hispanic (0,1) so that White and other were the categories not included. Mother’s education was included as a measure of SES and was collapsed from eight to four categories. The Woodcock-Johnson Applied Problems scale measures cognitive ability where high scores reflect greater ability (Woodcock & Manther, 1989, 1990). To account for the adolescent’s greater accessibility to social capital, a dichotomous variable was created to reflect father’s presence in the household, where 0=father does not live in household and 1=father lives in household. Child gender was recorded as a dichotomous variable where 0=male and 1=female. Including the Brief Symptoms Inventory and report card grades from wave two allowed for a measure of the change between wave two and three.

**Dependent variables.** The Brief Symptoms Inventory (BSI) was used to measure symptoms of somatization, depression, and anxiety. The transformed BSI score was used because it addressed the skew in the raw score (Cherlin, 1999). Higher scores indicate more problems in each of the three categories. Report card grades were reported by the focal child with responses ranging from one (mostly failing) to eight (mostly As).

**Statistical analysis**

The analysis plan follows the theoretical model described above and the hypotheses established from the literature review. Measures of social capital in the home and the school environment from wave two along with the control variables compose two ordinary least squares regression models that predict wave three academic achievement in one model and wave three BSI scores in another model. Four additional models are also included to examine social capital measures against the dependent variables separated by race/ethnicity to look at differences between the uses of social capital by Black and Latino adolescents independent from other racial
groups. The missing cases of father in household, Woodcock-Johnson Applied Problems, and BSI wave two variables were replaced using the SPSS RMV replace mean variable command.

**Results**

**Preliminary analysis**

Table 1 summarizes each of the variables in the models. There was some variation in the number of cases for each model. Thus, there are fewer cases in the academic achievement model because there were fewer respondents in reports of grades in school for both wave two and wave three. Several of the variables are also unevenly distributed. The majority of the respondents reported few extracurricular activities but high levels on the positive school friends and mother-child trust and communication scales. The majority of the mothers also reported high levels of school safety and low levels of education. The BSI was also non-normally distributed, with 19.7 percent of the youth rating zero on the scale in wave two and 24.7 percent in wave three.

Correlations were run among the social capital measures and the dependent variables. Several of the independent variables are positively significantly correlated together. These variables include extracurricular activities and church attendance, mother’s social support with school safety and mother-child trust/communication, and collective efficacy with school safety, mother-child trust/communication, and mother’s social support, among others. Interestingly, different independent variables were significantly correlated with report card grades in wave two and wave three and BSI in wave two and wave three. Wave two report card grades were significantly correlated with extracurricular activities, positive school friends, Woodcock-Johnson Applied Problems, and child gender, whereas wave three report card grades were significantly correlated with Woodcock-Johnson Applied Problems and child gender along with church attendance, and BSI wave two. Similarly, while significant correlations were found between positive school friends and mother-child trust/communication with the BSI measures in both waves, there were many differences found between each wave as well. All of the significant correlations were correlated in the anticipated direction, except for the positive relationship
between extracurricular activities and BSI wave two, and the positive relationship between report card grades in wave two and the BSI measure in wave three.

**Multivariate analyses**

Table 2 presents the results of an OLS regression analysis of adolescent academic achievement predicted by social capital measures in the family and school environment. The table indicates that school safety actually significantly decreases later academic achievement for Latino students \( p < .05 \) and borderline in the all races model \( p < .09 \). Grades at wave two of the study also significantly show a positive relationship between adolescent grades at wave three in each of the three models. The only measures of social capital from wave two that were significantly tied to wave three grade performance were the mother’s social support variable for the Latino model \( p < .05 \) and church attendance for the Black model, showing a borderline significant relationship \( p < .09 \). Additionally, several control variables seemed to be significant for the all races and Black models, including the Woodcock-Johnson Applied Problems score \( p < .001; p < .01 \) and the gender variable \( p < .01; p < .01 \) indicating that being female predicted higher grades. Mother’s education also significantly predicted academic achievement for Latino adolescents \( p < .01 \).

Table 3 indicates the results of an OLS regression analysis of adolescent BSI predicted by measures of social capital in the family and home environment. Higher scores on the BSI indicate more problematic symptoms of psychological illness; thus, negative coefficients in the models indicate that the variable decreases symptoms of psychological disorders. Overall, few of the predicted independent variables have a significant effect on the reported BSI score in wave three; the BSI scores from wave two seem to hold the most weight in the regressions for each of the three models \( p < .001 \) for all. The few significant independent variables that decreased BSI scores included neighborhood collective efficacy for the all races model \( p < .05 \), and a borderline significant relationship for mother social support and neighborhood collective efficacy in the Latino model \( p < .09 \) for both. Being female also significantly predicted a higher BSI
score in the all races and Latino model ($p < .05$ for both), and borderline in the Black model ($p < .09$).

**Discussion**

While cognitive abilities, gender, and some indicators of stronger social networks had some positive effects on the psychosocial outcomes for this group of low-income adolescents, many of the social capital measures did not show significant improvements for wellbeing. Although the hypotheses were established from a review of the literature surrounding social capital, few studies have examined social capital outcomes for minority adolescents who receive welfare. It seems that one plausible explanation for the lack of supporting evidence for the effect of social capital on the psychosocial welfare of low-income minority adolescents is that social capital does not benefit low-income groups in the same way that it does for people with more financial resources. The inconclusive results support the argument that bonding and bridging social capital cannot to increase psychosocial wellbeing of impoverished groups in the absence of greater social mobility, or vertical social capital, as others have proposed (Oyen, 2002).

The first hypothesis suggested that family social capital would be a better indicator of adolescents' academic achievement compared to school-based social capital; however, the regression models revealed very little evidence for social capital’s influence both in the family and the school environment. In the Latino model, mother’s social support did show a significant effect on academic achievement, suggesting that the amount of social support a mother reports positively affects her adolescent’s report card grades. This finding is congruent with others who have found the importance of familial ties among Latino families, especially immigrant families who often rely on their large family networks when they migrate to the US (Portes & Rumbaut, 2006). Within an impoverished community with few financial supports, the family support system may become a more important resource for Latino families.

Church attendance was borderline significant in the Black model, suggesting that having stronger networks in the adolescent’s home life may have beneficial effects on report card
grades. In this model, however, none of the other family social capital measures were significant. Counterintuitively, the analysis also suggested that school safety negatively affected report card grades for Latino adolescents. Overall, results indicate that previous report card grades, cognitive abilities, and being female are the greatest predictors of later academic achievement. While measures of previous grades and intellectual ability should generally predict academic achievement, the fact that girls outperform boys may be a characteristic of the poverty in which the youth were raised. Overall, beyond limited evidence for the importance of home-based social networks, this analysis suggests that social capital – at least for this group of youth – was of little consequence to their academic achievement.

Following the lack of supporting evidence for the differences of influence on academic achievement between family and school social capital, Table 2 also shows little evidence for the third hypothesis, which predicted that there would be significant differences in the uses of social capital between the African-American and Latino adolescents. However, the results show few differences between the Latino and African-American models in academic achievement and social capital. Interestingly, the independent variables in the Black model compared to the Latino model show greater variance (with $R^2$ values of .11 and .18, respectively).

The BSI models show similar results for the third hypothesis, that Black and Latino adolescents would use different measures of social capital to affect their psychosocial wellbeing. In the Black adolescents model, none of the social capital measures were significant, and the Latino adolescents model only shows school safety as increasing symptoms of psychological illness. Across each of the models, previous BSI scores are the best predictors of wave three BSI scores, and few of the social capital measures seem to be important.

The BSI results also provide little evidence for the second hypothesis – that individual home-based measures of social capital are better buffers from psychological illness than networks. With very few of the social capital measures showing any significance on BSI scores, it is difficult to compare different social capital measures. Although the results of social capital’s
effect on the later BSI scores of this population of low-income youth was largely inconclusive and insignificant, collective efficacy did show significance for the all races model. As this measurement of collective efficacy was individually recorded, it does fit the hypothesis and agrees with Giordano and Lindstrom’s (2011) finding that individual measures of collective efficacy increase psychological health. Interestingly, significance for the collective efficacy variable was lost when looking specifically at the Black and Latino adolescents, suggesting that there was a better relationship between collective efficacy and a lower BSI score for respondents in the White and Other race categories. While other studies have cited the correlational evidence for home-based measure of social capital, the causal link between social capital and mental health outcomes – especially for children – has been poorly established in the literature, and the findings of this analysis are further evidence towards this conclusion (McKenzie, 2006a). It should be noted too, however, that this study only sampled low-income minority youth, where effects of social capital measures on mental health outcomes have not been widely researched. Past research has shown that impoverished communities have a higher prevalence of poor mental health outcomes, and that minority communities are less likely to benefit from social capital (Duham & Wilson, 2007; Hero, 2003). Combined, these effects may result in the lack of significance for social capital to improve symptoms of mental illness for the youth in this sample. While social capital might positively affect the mental health of a middle-class White youth, social capital combined with stressors faced by a low-income minority adolescent may not produce the same benefits. The results indicate, then, that other factors such as poverty or oppression, for example, might outweigh any positive influences on the adolescent’s mental health. Another problem with the BSI models may have simply been that nearly a quarter of the adolescents showed no symptoms on the BSI in wave three, making it difficult to measure the relationship between mental health outcomes and social capital. The other youth who did show signs of mental illness on the BSI scale may have presented with severe symptoms that would not likely be altered by increasing the youth’s networks and relationships of trust and reciprocity.
Given the limited significance for social capital drawn from this study, it is difficult to make any conclusive statements about the importance of social capital for low-income adolescents. The regression models for social capital and academic achievement did yield more significant values compared to the BSI models, which show that independent social indicators have a greater effect on the dependent social indicator, academic achievement. Social networks may also be important aspects in students achieving good report card grades, but the analysis was too inconclusive to make any overarching interpretations. It was very interesting to find that the cognitive indicator of social capital – mother-child trust and reciprocity – was not a significant factor in academic achievement. Given the huge influence of mothers in youths’ upbringing, it would be difficult to conclude that trust and communication are not important for adolescents’ academic achievement at all, but rather that they may be important through less direct ways. Another interpretation for the mother-child trust and reciprocity variable is that some mothers may have positive relationships with their children, but either (a) They do not emphasize education with their children or (b) The mother cannot affect her child’s performance as a consequence of overwhelming negative influences in the child’s life. Portes (2000) emphasized the first of the two suggestions in his interpretation of academic achievement among immigrant youth, explaining that the differences between Asian and Mexican groups may be a cultural emphasis on academic achievement.

Another interesting finding from the BSI models was that collective efficacy was important in the All races model, but not the Black adolescents model and only borderline significant in the Latino adolescents model. This suggests that those who reported feeling closer to their neighbors were more likely to gain significant benefits from those relationships only if they were also in the White or Other racial category. As observed earlier, finding that social capital is more beneficial to non-minority groups is not a new concept; various other studies have come to similar conclusions (Duham & Wilson, 2007; Hero, 2003). McKenzie (2006b) also pointed toward low financial resources as an overwhelming factor in mental health that may
negate other benefits of social capital.

The lack of evidence for the importance of social capital for this sample population does not conclusively suggest that social capital is unimportant; several issues may have given rise to the largely insignificant results. Beyond operationally defining social capital, some of the variables were weak measures of the constructs they were meant to measure. In particular, using self-reporting to gain information about an adolescent’s grades can be problematic. Grades received by students also vary between teachers and schools, leaving more room for variation. The other dependent variable, transformed scores for the Brief Symptoms Inventory, is a widely used scale, but it was not created for youth and may have been the cause of some inaccuracy in the BSI models (Cherlin, 1999). As was noted in the preliminary analysis, many of the adolescents in the sample showed no symptoms of psychological illness at all.

Self-reporting could have also produced other problems with variation. The peculiar effect of the school safety variable is a prime example. A lack of school safety should not produce better grades or more symptoms of psychological illness as is suggested in this analysis, indicating that the variable may be problematic. The safety of the youth’s school was reported by the mother and was based only on the mother’s opinion rather than contextual evidence of the safety or lack of safety of the school. Thus, perhaps one mother’s opinion of the safety of her child’s school was based on the fact that her child had not been involved in violence that year, while another parent’s decision was based on a different set of parameters and opinions. Overall, more mothers reported high levels of school safety.

Another problem that may have affected the school safety variable and other variables in the sample was the homogeneity of the sample. The population consisted of low-income youth from three different cities that were predominantly African-American and Latino. The homogeneity of the sample could have produced patterns among other confounding variables not included in the dataset, such as neighborhood crime or issues of racism, that have important effects on the psychosocial indicators of adolescent wellbeing measured in this study. Or perhaps
the findings in this study are just further evidence toward the ineffectiveness of social capital to help minority populations (Duham & Wilson, 2007; Hero, 2003). Future research should investigate these social capital measures using a more heterogeneous sample.

The theoretical model for social capital used in the analysis may have also led to faulty conclusions about the importance of social capital for this sample. Although the theoretical model for social capital built by the ONS was constructed from a large body of supporting research, it was difficult to perfectly fit the model for the population used for this study (Harper, 2002). Despite the fact that one of the measures was missing (trust and reciprocity for the school environment) the variables that fit the specifications were also not entirely ideal. For example, using church attendance as a measurement of family social participation might not perfectly measure how involved an adolescent is in the community. A person could be completely secular and highly involved in the community in other ways, but this would not be reflected in the model. Another issue with the model of social capital used for this analysis could be that it fails to acknowledge social capital measures that might be important for racial minority groups. Social capital research has also been put under scrutiny because much research has been done using secondary analysis, and the measures that are then used to measure social capital do not always fit perfectly with the theoretical model (McKenzie, 2006b; Harper, 2002).

Despite all of the shortcomings of the theoretical and analytical models developed to study the effects of social capital on this sample of low-income adolescents’ psychosocial wellbeing, the lack of supporting evidence for the hypotheses still posits several interesting questions. A final alternative to consider is that these measures of social capital may just be unimportant in influencing psychosocial wellness for low-income populations surrounded by other, higher income groups such as those found in the United States. Both the US and the UK are home to high levels of socioeconomic inequality and low levels of social mobility (Cortak, 2006; Hungerford, 2011). Poverty, as well as other factors such as racism and a lack of upward social mobility, may overwhelm any positive impacts of social capital for the academic
achievement and psychological wellness of this population of adolescents. The idea that social
capital does not produce the same positive effects for minority populations is not new to the
discussion of social capital, and the current study has produced further evidence toward this
conclusion (Portes, 2000; Dunham & Wilson, 2007; Hero, 2003; McKenzie, 2006b).

While the preliminary analysis of the social capital measures showed that a majority of
the variables were evenly distributed, perhaps these relationships were only bonding/bridging
relationships, where the mother-adolescent pairs who reported high levels of trust and
reciprocity only held relationships with other people within their homogenous group of low-
income welfare recipients. Had the analysis focused on measures of vertical social capital,
perhaps social capital measures that were more influential for these psychosocial outcomes
would be observed. Measuring vertical social capital among minority populations in areas of
widespread inequity poses an interesting prospect for future research. However, considering the
lack of social mobility that is often paired with social inequity, it might be that measures of
vertical social capital within low-income populations would also correlate with low social
mobility. Oyen (2002) suggests, “If a majority of the poor are neither able to develop useful
networks for increasing their own social capital on a large scale, nor given entry into those
networks where social capital flourished, how can social capital then be an efficient instrument
for poverty reduction?” (p. 13). The results of this study propose that the positive effects of
social capital may be muted without higher levels of social mobility for people living in poverty.
Before governments begin to attribute social capital as the key to increasing the social
development of the some of their most disadvantaged populations, social capital’s influence on
psychosocial wellbeing deserves further analysis in light of the limited social mobility within
some nations.
References


Goldsmith, P.A. (2003). All segregation is not equal: The impact of Latino and Black school


Table 1.

Descriptive statistics for independent and dependent variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Range</th>
</tr>
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<tbody>
<tr>
<td>School environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extracurricular activities</td>
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<td>.291</td>
<td>0-1</td>
</tr>
<tr>
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<td>4.26</td>
<td>1.530</td>
<td>0-6</td>
</tr>
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<td>3.090</td>
<td>.837</td>
<td>1-4</td>
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<tr>
<td>Family environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church attendance</td>
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<td>.849</td>
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<tr>
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<td>4.198</td>
<td>.728</td>
<td>1-5</td>
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<td>2.298</td>
<td>.555</td>
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<td>27.61</td>
<td>9.617</td>
<td>9-45</td>
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<td>Controls</td>
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<td></td>
</tr>
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<td>.500</td>
<td>0 or 1</td>
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<td>.418</td>
<td>.493</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Latino</td>
<td>629</td>
<td>.485</td>
<td>.500</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Report card grades wave 2</td>
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<td>1.814</td>
<td>1-8</td>
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<td>BSI wave 2</td>
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<td>Dependent variables</td>
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<td>Report card grades wave 3</td>
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<td>1.152</td>
<td>0-4.06</td>
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Note: WJ=Woodcock Johnson; BSI=Brief Symptoms Inventory
Table 2. 
*Coefficients from OLS regression predicting academic achievement*

<table>
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<tr>
<th>Variables</th>
<th>All races</th>
<th>Black</th>
<th>Latino</th>
</tr>
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<tbody>
<tr>
<td>Intercept</td>
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<td>3.637**</td>
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</tr>
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<td>School environment</td>
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<tr>
<td>Extracurricular activities</td>
<td>-.022(0.275)</td>
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<td>-.001(0.397)</td>
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<tr>
<td>Positive school friends</td>
<td>.029(0.051)</td>
<td>-.033(0.082)</td>
<td>.079(0.072)</td>
</tr>
<tr>
<td>School safety</td>
<td>-.073(0.093) †</td>
<td>-.093(0.143)</td>
<td>-.135(0.130)*</td>
</tr>
<tr>
<td>Family environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church attendance</td>
<td>.051(0.091)</td>
<td>.107(0.138) †</td>
<td>.031(0.131)</td>
</tr>
<tr>
<td>Mom/child trust/Communication</td>
<td>-.043(0.106)</td>
<td>.006(0.159)</td>
<td>.088(0.153)</td>
</tr>
<tr>
<td>Mother social support</td>
<td>.044(0.143)</td>
<td>-.032(0.227)</td>
<td>.131(0.201)*</td>
</tr>
<tr>
<td>Neighborhood collective efficacy</td>
<td>-.018(0.008)</td>
<td>-.074(0.013)</td>
<td>.060(0.012)</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
<td>.069(0.095)</td>
<td>-.039(0.142)</td>
<td>.147(0.137)**</td>
</tr>
<tr>
<td>WJ Applied Problems wave 2</td>
<td>.151(0.025) ***</td>
<td>.185(0.040)**</td>
<td>.108(0.036) †</td>
</tr>
<tr>
<td>Father in household</td>
<td>.039(0.198)</td>
<td>-.030(0.364)</td>
<td>.044(0.255)</td>
</tr>
<tr>
<td>Gender</td>
<td>.118(0.157)**</td>
<td>.194(0.242)**</td>
<td>.094(0.232)</td>
</tr>
<tr>
<td>Black</td>
<td>.116(0.287)</td>
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<tr>
<td>Latino</td>
<td>.103(0.284)</td>
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<tr>
<td>Grades wave 2</td>
<td>.266(0.047)***</td>
<td>.194(0.242)**</td>
<td>.286(0.066)***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.13</td>
<td>.11</td>
<td>.18</td>
</tr>
<tr>
<td>$N$</td>
<td>564</td>
<td>234</td>
<td>279</td>
</tr>
</tbody>
</table>

*Note. OLS = ordinary least square; WJ=Woodcock Johnson.*

†$p < .09$. *$p < .05$. **$p < .01$. ***$p < .001$. 
Table 3.  
**Coefficients from OLS regression predicting Brief Symptoms Inventory**

<table>
<thead>
<tr>
<th>Variables</th>
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<th>Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
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<td>2.921***</td>
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</tr>
<tr>
<td>School environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extracurricular activities</td>
<td>-.004(.155)</td>
<td>-.009(.248)</td>
<td>-.021(.221)</td>
</tr>
<tr>
<td>Positive school friends</td>
<td>-.011(.029)</td>
<td>.013(.049)</td>
<td>-.066(.041)</td>
</tr>
<tr>
<td>School safety</td>
<td>.055(.053)</td>
<td>-.017(.087)</td>
<td>.120(.073)*</td>
</tr>
<tr>
<td>Family environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church attendance</td>
<td>-.016(.052)</td>
<td>-.097(.083)</td>
<td>.034(.074)</td>
</tr>
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<td>Mom/child trust/Communication</td>
<td>-.023(.063)</td>
<td>-.051(.100)</td>
<td>-.001(.091)</td>
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<td>Mother social support</td>
<td>.024(.082)</td>
<td>-.046(.136)</td>
<td>.103(.115)†</td>
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<td>Neighborhood collective efficacy</td>
<td>-.101(.005)*</td>
<td>-.078(.008)</td>
<td>-.109(.007)†</td>
</tr>
<tr>
<td>Controls</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
<td>.034(.054)</td>
<td>.014(.086)</td>
<td>.030(.078)</td>
</tr>
<tr>
<td>WJ Applied Problems wave 2</td>
<td>-.045(.014)</td>
<td>-.106(.025)</td>
<td>.026(.020)</td>
</tr>
<tr>
<td>Father in household</td>
<td>-.055(.112)</td>
<td>-.067(.210)</td>
<td>-.036(1.45)</td>
</tr>
<tr>
<td>Gender</td>
<td>.090(.089)*</td>
<td>.116(.147)†</td>
<td>.125(1.25)*</td>
</tr>
<tr>
<td>Black</td>
<td>-.046(.158)</td>
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</tr>
<tr>
<td>Latino</td>
<td>-.100(.156)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI wave 2</td>
<td>.347(.043)***</td>
<td>.300(.073)***</td>
<td>.378(.061)***</td>
</tr>
<tr>
<td>R²</td>
<td>.14</td>
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<td>.18</td>
</tr>
<tr>
<td>N</td>
<td>600</td>
<td>252</td>
<td>289</td>
</tr>
</tbody>
</table>

*Note. OLS = ordinary least square; WJ=Woodcock Johnson; BSI=Brief Symptoms Inventory; †p < .09. *p < .05. **p < .01. ***p < .001.*