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The relationship between mother's education and parent involvement

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science
at Virginia Commonwealth University.

by

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Abstract: Despite an extensive body of literature on the relationship between the parents' education and the child's academic outcomes, there is considerably less research into the factors that influence parent involvement. The purpose of this study is to examine the correlates associated with parent involvement with their child inside and outside of school. I use Pierre Bourdieu's theory of the *Forms of Capital* and *Habitus*, specifically focusing on cultural capital, to frame my analysis. I use data from the 2007 National Household Education Survey of Parent and Family Involvement (n=10,628), a nationally representative sample, to examine if mother's level of education is associated with different dimensions of parent involvement. I examined six dimensions of parent involvement: parent involvement at school, parent volunteering, cultural activities, cultural outings, group activities, and homework help. Mother's level of education was significantly associated with all types of involvement except homework help.

Introduction

Education has long been the subject of sociological inquiry, from Emile Durkheim (1922) to Pierre Bourdieu (1986). Coleman's (1966) landmark report, "Equality of Educational Opportunity," drew attention to the relationship between socioeconomic status (SES) and academic outcomes for children. Parent involvement mediates this relationship (Gonzalez-Dehass, 2005).

Studies show that parental involvement has a positive effect on academic outcomes (Lareau, 1987; Bowen & Lee, 2006). Parent involvement in research is often explored as a multi-dimensional concept (Kohl et al., 2000), which means there are different ways parents can become involved in their child's education. For example, parents can help their children with schoolwork at home, attend parent-teacher meetings, or take their child to a museum or library, and all of these activities would be considered different types of involvement. While types of involvement are often associated with one another, involvement in specific activities is dependent on the parents' available resources (Grolnick and Slowiaczek, 1994).

However, the extent to which parents become involved in their child's education is more than a matter of desire. Parents with more resources are better able to become involved (Grolnick and Slowiaczek, 1994), and parent resources can extend beyond economic capital. This paper uses the theoretical framework of Pierre Bourdieu's *Forms of Capital* and *habitus* to explore if parental resources and mother's level of education are associated with parent involvement. The theory of different forms of capital suggests that parents transfer their status to their children

through pathways above and beyond monetary transfers. It also suggests that while parents' level of education has a positive effect on parent income (Eccles, 2005), parents can use their experiences from and their knowledge of educational institutions to benefit their child and offer more opportunities for success in school (Lareau, 1987). Mother's education functions as a form of cultural capital in the present study in order to explore these possible correlations between parent involvement and the mother's non-economic resources.

The purpose of this paper is to explore the relationship between mother's level of education and types of parent involvement. I will examine whether mothers with higher levels of education are more involved with their child both inside and outside of school than those with less education. I hypothesize that mother's level of education will be significantly and positively associated with all categories of parent involvement. I use Pierre Bourdieu's *Forms of Capital* and *Habitus* in addition to a comprehensive literature review of studies in the field to argue my hypothesis. In order to conduct this analysis, I also create multiple measures for parent involvement.

Literature Review

Parental Involvement

Heath (1984) noted two sources of education, one of which is educational institutions, the other of which is, "...the cultural transmission which enables us to learn ways of believing, behaving toward, and valuing people around us. This is an education in which we learn identity, attachments, assumptions, and implicit and explicit rules." This secondary source of education is largely reliant on more personal sources of influence, such as family or friends. The function of parent status is not, therefore, merely a matter of economic resources the parents can transfer to their children. Parents communicate values and share experiences with their children in order to

benefit them academically. Parents offer both implicit and explicit support their child's education through types of involvement. Researchers have conceptualized parent involvement in a number of different ways (Bowen & Lee, 2006). Although some studies view parental involvement as a process that occurs between the parent and child, other models consider the role of the school and teacher in involvement (Kohl et al., 2000). Studies show that both parents and schools want to be more involved with one another, but report they often don't know how (Eccles & Harold, 1996; Epstein, 1995). Grolnick and Slowiaczek (1994) defined parent involvement as "the dedication of resources by the parent to the child within a given domain." Parent resources can extend beyond economic capital (Grolnick & Slowiaczek, 1994). For example, activities like helping child with homework or participating in school may require the parent to invest time or expertise instead of money. However, economic resources influence a parent's ability to engage in different types of involvement. There are other activities, such as music lessons and organized sports, which often require payment from the parents.

There is little consistency in the literature pertaining to parent involvement (Fan and Chen, 2001), from disparate findings to the use of different measures and definitions of parent involvement. Much of the research has focused on multiple dimensions of parental involvement. Researchers have worked to distinguish between and measure involvement by parents in different areas. For example, help with homework and attending parent-teacher meetings are both forms of involvement. However, researchers may conceptualize homework help as a form of at-home involvement (Grolnick & Slowiaczek, 1994), while meetings at school are considered at-school involvement. Epstein (1995) conceptualized education as a partnership between the community, the school, and the family. Grolnick and Slowiaczek (1994) stressed the importance of parents and children being actively involved in the process. When the child actively processes

parent input, it reinforces the importance of their education. Epstein (1995, 2010) suggested that children need to be supported by, as well as engaged by the parents, the school, and the community. The focus in this model is also on reinforcing education, but adds the community as a third component.

Constructions of parental involvement in research vary; some studies combine variables to create a single dimension of parental involvement, while others look at separate measures of parental involvement (Kohl et al., 2000). For instance, Grolnick and Slowiaczek (1994) conceptualized a model of parental involvement across three categories to explore the processes through which parents provide resources: behavioral, intellectual/cognitive, and personal. Each category was combined with multiple variables. Parent behavior includes at-school activities the parent may be involved in. Intellectual/cognitive activities are those that engage the child and keep them connected to learning when outside the school. Finally, personal involvement explores psychological aspects of positive communication around education, such as the parent knowing asking about the child's education or having knowledge of what goes on in the school (Grolnick & Slowiaczek, 1994).

Eccles and Harold (1996) used five categories to measure parent involvement as reported by the parent. They used three scale variables and two single questions. The first category was "monitoring," which included at-home involvement by the parents like checking homework and listening to children read. The second category was "volunteering," which included parent involvement in volunteer activities at the school. The third category was "involvement," which was similar to monitoring but included involvement with homework and interaction with the child in daily activities. The fourth category was progress, which is a one-variable measure that asked whether parents contact the school about their child's progress. The fifth and final

category of parent involvement was “extra help,” another one-variable measure that asked whether parents contacted the school about extra help the parent can provide (Eccles and Harold, 1996).

Another conception of parent involvement can be found in the research conducted by Epstein (1995) in which she constructed a six-category model of involvement. Each category is a combination of concepts that address a specific and separate area of involvement. The first category was “parenting,” which focused on fostering the home environment to be supportive of and conducive to learning. The second category was “communicating,” which looked at continuous communication between the parent and school. The third dimension was “volunteering,” which focused on parents being able and prepared to volunteer. The fourth category was “learning at home,” which looked at how to help parents help their children with schoolwork and communicate with the child about their education. The fifth category was “decision making,” which looked at a more inclusive model of education for parents in the decision-making process, and the sixth category was “collaborating with community,” the focus of which was to integrate community resources into the child’s education to act as another area of support for the child, family, and school. Epstein’s model used prior research to construct categories in order to focus on action plans for communities. (Epstein, 1995).

Even with a large body of existing literature, it is difficult to make any general claims about parental involvement. Fan and Chen (2001) suggest neither parental involvement nor outcomes can be generalized. This is in part due to inconsistent measures of parent involvement throughout the literature. There are also different theoretical frameworks used to explore and explain how and why parent involvement functions to mediate the relationship between SES and student academic outcomes. For example, Lareau and Horvat (1999) used Bourdieu’s

framework of forms of capital to examine how parent involvement is shaped by social contexts. They focused on three concepts: how social capital is used, the values given to capital, and how the institution legitimizes capital (1998). This paper also uses Bourdieu's theoretical framework, however I will be focusing more on the influences of cultural capital, which will be outlined in the next section.

Pierre Bourdieu

Capital is transmitted in its various forms to reproduce social systems (Bourdieu, 1986). When social systems are reproduced, then those with preexisting capital have more means to transfer status. The higher the status, the more likely a family is to have more than one form of capital they can use to transmit that status and benefit their own family (Bowen & Lee, 2006). Likewise, high-SES families are better able to pass on their status in an attempt to ensure success for their child.

Parents may transmit status to children by using social connections or cultural experience and knowledge. Bourdieu (1986) identified four types of capital: economic, social, cultural, and symbolic. Each form can be converted into another form of capital. The most recognized way of transferring status is through economic capital, which is typically money or something that can be directly converted into money. Bourdieu notes (1986) that economic capital is the central force of conversions. Social and cultural capital can be converted into economic capital under certain circumstances. Social capital, defined as the collective resources associated with social networks, which typically represents membership in a group, is transmitted by way of social connections (Bourdieu, 1986). Cultural capital is third form of capital and requires some investment by the parent. Symbolic capital is the fourth form of capital, which is recognition in the form of prestige.

Cultural capital is the most common of Bourdieu's theories to be explored in education research (Dumais, 2002). Within the framework of social reproduction, high-SES parents will have more access to high culture and cultural institutions, and can transfer that culture to their children. The purpose is for the individual's culture to comply with the dominant culture, because the dominant culture determines the value of cultural capital. If schools value a certain type of culture, children with access to that same culture may be rewarded. Bowen and Lee (2006) found that parents who do not feel they do not share the same culture as the school may be more uncomfortable interacting with the school than parents whose values and culture fits with the schools'.

Cultural capital exists in the embodied, objectified, and institutionalized states (Bourdieu, 1986). Cultural capital in the embodied state is accumulated from personal investments into culture. An investment, such as that of time or money, must be made in order to receive the cultural capital (Bourdieu, 1986). In the objectified state, value may be assigned to an object, such as a piece of art. Value is assigned by the dominant culture, so when individuals show they share these values, especially in cultural forms, it represents the individual's ability to conform to the dominant group. It is not enough to have art or culture; instead, an individual must have the "right taste" in art or music. The purpose of these items is to reflect an individual's shared values with the dominant group. These objects represent an investment of time, money, or other resources. For instance, a college degree also functions as cultural capital in the objectified state; however, unlike a painting, a college degree cannot simply be purchased at a gallery in order to confer prestige to the buyer. The objectified state of cultural capital is one where the individual can use a physical object to show their access or place within the dominant cultural, which is viewed as a prestigious group.

Cultural capital also exists in the institutionalized state. Educational institutions are an example of cultural capital in the institutionalized state. In the institutionalized state, it is an association with an institution that is typically accessed only by members of the dominant culture. Access to an institution is not enough to confer status, however. An individual must fit in within the setting, which indicates not only an understanding of the expectations of the institution, but an ability to meet those expectations as well. Within the context of reproducing social systems, parents may use their experience in higher education to prepare their children for future access to the same level of education.

Symbolic capital is the legitimization of other forms of capital, typically cultural, and it manifests in the form of prestige. (Bourdieu, 1986). Legitimization can be a vague concept and may be better understood as recognition. When actions, belongings, or values are seen as belonging within the dominant cultural, they are recognized and if accepted by the dominant cultural, they confer status the individual. Simply put, individuals that meet the implicit expectations of the group are rewarded with the status of being a member of dominant culture.

Another important concept put forth by Bourdieu (1977) is that of habitus. Habitus is the system of practices produced by being part of a certain environment (Bourdieu, 1977). Bourdieu asserted that while habitus is associated with the culture, it is driven by the individual and is not forced by the dominant group. Habitus reinforces the structure of the environment, such as social class, in order to reproduce the structure.

Current belief systems and practices are therefore based on past systems and practices. This would reinforce the idea that parents largely draw their parenting practices from their own parents. The values and actions within the existing system support one another and act

reflexively. Habitus affects children in these environments when the actions affect their values and belief system to reflect that of their parents.

Wealthy white men had access to higher education for many years before women were admitted. Today, it is not shocking to see women or even minorities in higher learning. These changes did not occur over night, or even within the span of a generation. College enrollment for women has been increasing since the 1970s (Aliprantis & Dunne, 2011), which is evidence of both shifting attitudes about women in college and more institutional accessibility for women. Occupational and educational prestige are now more accessible for women, and the resources parents pass down are less likely now to be solely those of the father. If mothers value education, and they have the resources, their values are then translated into action in the form of involvement in the child's education. If fathers value education, but are less likely to become directly involved in their child's education, the values may not be instilled.

Mothers have held the traditional role of caregiver for years. When mothers are highly educated, but maintain the role of caregiver, they are able to directly confer their resources to their children. When mothers have higher levels of education, it puts them in a better position to not only make decisions about their child's education, but also gives them the resources to do so.

Mother's Education

The relationship between parents' education and parent involvement continues to interest researchers. Kohl et al. (2000) found lower that levels of parent education were associated with lower levels of active parent involvement. They reported that parent education had a positive relationship with parent involvement at school, parent-teacher contact, teacher perception of parent's value of education, and parent involvement at home (2000). Bowen and Lee (2006) found that parents with a 2-year college degree or higher report more parent-child discussion

about education at home, more involvement at school, and higher expectations for their child's education. They reported that parent education did not, however, have an apparent effect on time management or frequency of help with homework. Eccles (2005) asserted that parents with more education are more likely to enroll their children in extracurricular programs like music lessons, educational camps or clubs, and math and computer programs.

Research typically focuses on the father's level of education or a combination of both parents' education. For example, Kohl et al. (2000) used a mean z-score of parent's combined education. Bowen and Lee (2006) used the highest level of education of the caregiver, using the highest of either caregiver in two-parent households. Though seldom explored as an individual variable, mother's level of education is a logical measure to use. Mothers are more likely to directly involved in many aspects of their child's education than fathers (Coyle-Shepherd & Newland, 2013). Father's level of education was typically used as a measure of parent education, though later studies often include both parents, as it has become more accepted and likely for both parents to be educated in the past few decades.

My goal in this analysis is to extend the literature that has examined parental educational attainment and its effect of parent involvement to focus on the role of maternal educational attainment. In the 1960s, more women began to attend college, and enrollment continued to increase through the 1970s. After the 1970s, women's college attendance continued to increase over time (Aliprantis and Dunne, 2011). Another reason mother's education is used is that mothers are more likely to be actively involved with certain aspects of the child's education. The more resources mothers have available, the more they can transfer to their children. If mothers have more cultural capital in the form of education, they can transfer that capital to the child. Coyle-Shepherd and Newland (2013) found that mothers reported more individual involvement

in the classroom and at school events, as well as more communication with the teacher. Lareau and Weininger (2008) found that mothers had a more active role in planning activities for children, such as sports or performing arts, and while parents share some of the responsibility of children's activities, but mothers feel more of the stress associated with the activities. Mothers are also more likely to pass cultural knowledge to their children (Dumais, 2002). Finally, maternal education has been shown to be a powerful measure of human capital and may be indicative of a family's disposition (*habitus*) regarding the importance of education in a way that paternal education does not, since historically it was more normative for men to have higher levels of education (Parcel and Dufur, 2001), so a family that values female education may be more likely to value education in general. When a family invests in female education, they are behaving in a way that supports a middle-class ideology that values education and acknowledges the need for education to maintain their status. Mother's education is therefore is a good measure to capture effects of parent education on involvement. There may be varying effects depending on how parent education is operationalized and the effects that are meant to be captured.

The function of parent education in parent involvement and child's academic outcomes varies across the literature. Higher levels of education are traditionally associated with higher socioeconomic status (Eccles, 2005). As Eccles (2005) noted, level of education plays a role in who a person marries, their occupation, and their income. Therefore, parent education can be used as an economic factor or indicator of social status. Within this framework, the effects of parent education on child outcomes are indirect (Eccles, 2005). Other studies use parents' level of education as an indicator of cultural capital. For example, DiMaggio (1982) used father's level of education to represent possession of cultural resources. He found weak correlations between father's education and academic outcomes. Studies have noted the broad positive association

between parents' education and child's achievement (Eccles, 2005). Parents with more education are more likely to enroll their children in extracurricular programs like music lessons, educational camps or clubs, and math and computer programs (Eccles, 2005).

Parent Characteristics and Parental Involvement

Parent's socio-demographic characteristics are often explored as factors that influence parental involvement. Race is often explored in studies that focus on parent involvement. While some studies compare black and white parents (Sui-Chi & Willms, 1996), others look only at specific ethnic or racial groups (Hayes, 2011; Lareau, 1987). Sui-Chi and Willms (1996) found that black and Hispanic parents were more likely than white parents to engage in certain types of involvement, mostly centered around the home, such as homework help, while white parents were more likely to be involved at the school.

Child's grade level also plays a role. Involvement may vary by grade level (Aliprantis & Dunne, 2011), and some forms of involvement may be more common depending on whether the child is in elementary, middle, or high school. Aschaffenburg and Maas (1997) assert that cultural capital is not static and attainment may vary by child's school level. This means parents may be more involved at one level of the child's education, or they may become involved in different ways depending on the school level. Parents are generally more likely to be heavily involved with their children when their children are younger, typically elementary-level, and less as they enter adolescence, using grade level can indicate where involvement practices differ. Amato and Rivera (1999) found a negative relationship between parents' age and parent involvement, and suggested this maybe because older parents are more likely to have children in adolescence and don't feel the need to be as involved.

SES is also an important factor. Lareau found that parents from all economic backgrounds value education (1987). However, many studies find that it is high-SES parents who are actually more involved in their child's education or have influence over their child's academic outcomes (Grolnick & Slowiaczek, 1994). Employment status fall within the SES category, and is important because while employment may indicate income and social status, it may also mean parents who work more have less time to devote to their children and that those with less work have more time to dedicate to their children. Poverty is associated with lower academic achievement for children (Bowen & Lee, 2006), which indicates it could affect parent involvement. Finally, whether or not the school is public or private is often contested as effecting parent involvement (Mulligan, 2003). Mulligan (2003) asserted that public schools are more likely to initiate and offer more ways more formalized way for parents to become involved, largely because of their size and ability to organize more events. However, private schools increasingly require parent involvement (Benveniste et al., 2003). The conflicting findings on private and public school involvement indicate the importance of factoring school type into any exploration of parent involvement.

Purpose of Study

This paper has two major purposes. Since the majority of research on parental involvement has been either small in scope or qualitative, I will use a large nationally-representative sample to determine what correlations, if any, exist between mother's level of education and different types of parental involvement. The second purpose of this paper is to extend the research on parental education as a correlate of parental involvement which has traditionally emphasized paternal education to explore maternal level of education as the independent variable. The educational attainment of mothers was used for two reasons. The first

reason is that there are a growing number of women in higher education; men were traditionally more likely to attend college, up until the 1960s, after which women began enrolling in college, with increasing enrollment for women throughout the following decades (Aliprantis & Dunnee, 2011). While women are increasingly attending college or further, they are still primary caretakers of the children, and this knowledge of the institution allows women to directly confer their resources to their children. The second reason mother's education is used is that mothers are more likely than fathers to be actively involved in their child's education. I use Pierre Bourdieu's *Cultural Capital* theory to support the argument that mother's level of education is representative of a set of resources beyond the economic. **Research Question**

My research question is whether mother's level of education influences type of parent involvement. Using mother's education as an indicator of cultural resources, I hypothesize that mother's level of education will have a significantly positive associated with each type of involvement.

Methods

Data. Data were taken from Parent and Family Involvement in Education (PFI) Survey of the 2007 National Household Education Surveys Program (NHES:2007). The purpose of the surveys is to determine educational trends in the United States, including educational experiences and educational conditions. During the initial NHES phone survey, one eligible child between Kindergarten and 12th grade was selected for the PFI survey. The PFI survey collected information in the following areas: (1) involvement with homework school practices to involve families, (2) involvement in school activities, events, and meetings (3) involvement in activities outside of school (NHES: 2007). The NHES/PFI is a random-digit-dial telephone survey of U.S. households conducted for the U.S. Department of Education's National Center for Education

Statistics (NCES). In 2007, the NHES/PFI Survey completed 10,681 interviews with parents or guardians of a nationally representative sample of public, private, and home schooled children enrolled in grades K–12. There was a 39 percent response rate. The PFI Survey asks the person in the household who is most knowledgeable about the child’s education to provide information about household socio-demographic characteristics, family involvement in the child’s school and home activities, school efforts to involve the family in school activities, and parental involvement with the child’s homework. Mothers made up 73.5 percent of the respondents. Private, public, and homeschooled children were included in the sample, with 311 homeschooled students, 9,003 public school students, and 1,367 private school students.

The analytic sample for this study is limited to public and private school children, and a total of 311 cases were therefore dropped from the sample based on type of school.

Homeschooled children are not included in the sample because several dimensions of parent involvement include interaction between the parent and the school. Missing values were also dropped for mother’s education and child’s grade level, leaving a final sample of (N=9,787). Sample variables were all weighted for screening and sampling non-response to account for undercoverage from using household telephone interviews only. All statistical analyses were run using SPSS version 21.

Measures

Dependent variables. I am exploring six types of involvement as the outcome variables. Parent involvement is often conceptualized as multi-dimensional (Fan and Chen, 2001; Kohl et al., 2000). For this reason, factor analysis with varimax rotation was conducted to see if the parent involvement questions contained in the PFI captured specific and separate types of parenting practices. This analysis yielded six separate dimensions of parent involvement:

involvement at school, parent volunteering, cultural activities, cultural outings, group activities, and homework help.

Table 1A (in the appendix) shows the factor analysis results for involvement at school and parent volunteering factors. The first outcome variable in my analysis was parent *involvement at school*. This scale variable was constructed using the questions in the PFI that asked specifically about parent involvement with the school. The survey asks, “Since the beginning of the school year, has an adult in your household done any of the following related to (child’s) school: (a) Attended a general school meeting, for example, an open house, or a back-to-school night?; (b) Attended a meeting of the parent-teacher organization or association?; (c) Gone to a regularly scheduled parent-teacher conference with (child’s) teacher.” Responses to these questions are dichotomized as yes (1) and no (0), and were summed to create a scale variable that measures the level of mother’s involvement at the school with a scale ranging from 0-3.

The second outcome variable was parent volunteering. This scale variable was constructed using four questions in the PFI that ask about volunteering at the school. The PFI survey asks, “Since the beginning of the school year, has an adult in your household done any of the following related to (child’s) school: (d) Attended a school or class event, such as a play, dance, sports event, or science fair because of (child); (e) Served as a volunteer in (child)’s classroom or elsewhere in the school; (f) Participated in fundraising for the school?; (g) Served on a school committee”. Responses to these questions were coded as yes (1) and no (0) and were summed to create a scale variable ranging from 0-4.

Cultural activities, cultural outings, and group activities were composed using a factor analysis of several variables. The first group of questions asks about specific activities done with

the child. Respondents were asked, “In the past month, has anyone in your family done the following things with (child): (a) Visited a library; (b) Visited a bookstore; (c) Gone to a play, concert, or other live show; (d) Visited a museum, art gallery, or historical site?” The second group of questions looked into child participation in specific activities. Respondents were asked, “During this school year, has (CHILD) participated in any of the following activities outside of school: (a) Regular music lessons; (b) Church or temple youth group or religious classes; (c) Organized sports that are supervised by an adult; (d) Scouting or other club activities; (f) Performing or other arts?” Responses to these questions were coded as yes (1) and no (0).

Table 2A (in the appendix) shows the factor analysis results for cultural activities, cultural outings, and group activities. Each variable was summed to create a scale that ranged from 0-3. The factor analysis indicated three components. *Cultural Activities* were composed of regular music lessons, performing or other arts, or a trip to the theater or a live show. *Cultural Outings* were composed of visits to the library, bookstore, and museum. *Group activities* were composed of organized sports supervised by an adult, scouting or other club activities, or church/temple youth group/religious classes.

The final outcome variable was homework help. This variable was constructed using three dichotomous questions from the PFI about help with homework. Respondents were then asked, “Are there family rules for (child) about doing homework?” The second question was, “Do you check to see that (Child)’s homework is done?” The third question was, “During this school year, about how many days in an average week do you or does anyone in your household help (him/her) with (his/her) homework?” Responses to these questions were re-coded into a dichotomous variable of helped with homework where yes (1) and (no). Responses to the other two questions were also coded as yes (1) and no (0), and all three were summed to create a scale

variable ranging from 0-3 that measures the amount of mother's involvement with the child's homework.

Independent variables. The primary independent variable used in my analysis was mother's level of education. This variable was operationalized as four dichotomous variables: less than high school, high school diploma or equivalent/some college or technical school, and college or higher.

Control Variables. Socio-demographic characteristics of the mother were included as control variables. These include mother's race/ethnicity, marital status, and employment status.

Racial/ethnic groups included were entered as White, Black/African American, Hispanic, Asian, and Other. Race was coded into four dichotomous categories where yes (1) and no (0), and white mothers were dropped from the regression as a comparison group. Mother's age was coded as a continuous variable from 18-65 years old. In the original survey, mother's marital status was recorded as (1) married or remarried; (2) separated; (3) divorced; (4) widowed; and (5) never married. For purposes of this analysis, responses were dichotomized as married (1) or not married (0).

SES was measured using total household income and Medicaid recipient status. SES was measured using total household income and Medicaid recipient status. Income was categorized into three categories: less than \$49,999 a year, \$50,000 to \$74,999 a year, and \$75,000 or more a year. Because annual family income was provided independent of household size, I controlled for Medicaid as a measure of poverty level, which was coded as yes (1) and no (0). This will indicate differences between families living above and below poverty levels; because, at the time that the data was gathered, those who qualified for Medicaid were most likely to have incomes

below the federal poverty level. This will indicate differences between families living above and below federal poverty levels. Mother's employment status was coded as yes (1) and no (0).

The last two control variables included were child's grade level and school type. Child's grade level was operationalized as elementary school, middle school, and high school. These were dichotomous categories. High school was dropped as a comparison group. School type was entered as private (0) or public (1).

Results

Descriptive Analysis.

Table 1 shows the descriptive statistics for the analytic sample. Mothers with less than a high school diploma represented only 7.7 percent of the present sample. Mothers with a high school diploma or some college made up 53.3 of the sample, and mothers with a college degree or higher represented to remaining 40 percent. The majority of women in the study were white (65.5%). Black women comprised 11.6 percent of the sample, Hispanic women 16.1 percent, and both Asian women and women from another racial background made up 3.7 and 3.1 percent of the sample respectively. The mean age of mothers was 41 years of age. Mothers who were unemployed represented 20 percent of the sample. For child's grade level, 40 percent of the sample were in elementary school, 23.9 percent in middle school, and 36.1 percent in high school. Children enrolled in public school made up 86.4 percent of the sample.

Table 2 shows the descriptive statistics for types of involvement. As discussed in the methods section, types of parent involvement were made into scale variables. Involvement at School ranged from 0-3, with a mean score of 2.2. Parent volunteering scores ranged from 0-4 with an average score of 2.1. The remaining variables all ranged from 0-3. The average score for

cultural activity was rather low at .7241. For cultural outings and group activities, parents scored an average of 1.1 and 1.3 respectively.

Multivariate Analysis

Parent Involvement at School. Table 3 shows the OLS regression results for parent involvement at school. Model 1 is unadjusted. It looks at the effect that maternal education has on parental involvement at school. Mother's education was significantly associated with parent involvement at school. Mothers with less than a high school diploma scored .051 standard deviations less than mothers with a high school diploma or some college on the involvement at school scale ($\beta = -.051, p < .001$). Mothers with a college degree or higher scored .097 standard deviations higher on the scale for involvement at school than mothers with a high school diploma or some college ($\beta = .097, p < .001$). Model 1 accounted for only 2 percent of the variation in involvement at school.

In model 2 of the regression analysis, I controlled for socio-demographic characteristics, which increased the model fit. When mother's socio-demographic characteristics were entered, the effects of mother's education increased. Mothers with less than a high school diploma scored .073 standard deviations less than mothers with a high school diploma or some college on the school involvement scale ($\beta = -.073, p < .001$). A college degree or higher had a strong positive relationship with involvement at school ($\beta = .102, p < .001$). Mother's race was also a significant factor when considering school involvement both African American and Latina women had higher scores on the school involvement scale compared to non-Hispanic white women ($\beta = 0.079$ and $0.070, p = .001$ respectively). Mother's marital status ($\beta = .054, p < .001$) and employment status ($\beta = .039, p < .001$) were also significantly associated with involvement at school in model

2, but both correlations were relatively weak. Model 2 explained 5 percent of the variation in parent involvement in school.

When child's grade level and school type were entered into the fully adjusted model (3), the relationship between mother's level of education and involvement at school weakened, but remained significant for mothers with less than a high school diploma and mothers with a college degree or higher with ($\beta = -.070, p < .001$) and ($\beta = .059, p < .001$) respectively. Model 3 accounted for 12 percent of the variation in involvement at school. Mother marital status and mother's race remained significant in the final model, though child's grade level had the strongest relationship with parent involvement at school. Mothers of children in elementary school scored .333 standard deviations higher on the school involvement scale than mothers with a child in high school. Though the correlation was lower for mothers of children in middle school, they were still significantly associated with involvement at school ($\beta = .168, p < .001$). One standard deviation unit increase in middle school equaled a .168 increase in parent involvement at school.

Parent Volunteering. Table 4 shows the OLS regression results for parent volunteering. Mother's education was significant for less than a high school diploma and a college degree or higher ($\beta = -.180$ and $.205, p < .001$ respectively). The unadjusted model explained 9 percent of the variation in parent volunteering. After controlling for mother's socio-demographic factors in model, the associations for mother's education decreased, but remained significant. Less than a high school education had a negative relationship with parent volunteering ($\beta = -.119, p < .001$), while a college degree or higher had a strong positive relationship with parent volunteering ($\beta = .139, p < .001$). Model 2 explained 14 percent of the variation in parent volunteering, a 5.3 percent increase from model 1. All socio-demographic factors were significantly correlated with parent volunteering except black mothers and mothers from another racial background.

When child's grade level and school type were entered into the full adjusted model, the associations for mother's education weakened, but remained significant. Mothers with less than a high school diploma scored .116 standard deviations lower on the parent volunteering scale ($\beta = -.116, p < .001$). Mothers with a college degree or higher scored .098 standard deviations higher on the volunteering scale; every one unit increase in a college degree or higher equaled a .098 standard deviation increase in parent volunteering ($\beta = .098, p < .001$). Model 3 explained 21 percent of the variation in parent volunteering. All socio-demographic factors remained significant except mother's employment, but none were more significant than mother's education. Elementary school and school type had the strongest relationship with parent volunteering. One standard deviation unit increase in elementary school equaled a .254 unit increase in parent volunteering ($\beta = .254, p < .001$). One standard deviation unit decrease in school type equaled a .139 increase in parent volunteering ($\beta = .139, p < .001$).

Cultural Activities. Table 5 shows the OLS regression results for cultural activities. Mothers with less than a high school diploma scored .073 standard deviations lower on the cultural activities scale than mothers with a high school diploma or some college ($\beta = -.073, p < .001$). Mother's with a college degree or higher scored .205 standard deviations higher than those with a diploma or some college on the cultural activities scale ($\beta = .205, p < .001$). The unadjusted model explained 5 percent of the variation in cultural activities. When mother's socio-demographic characteristics were entered into model 2, the correlations between mother's level of education and cultural activities decreased, but remained significant for less than a high school diploma and a college degree or higher ($\beta = -.052$ and $.163, p < .001$). Asian mothers scored .038 standard deviations higher on the cultural activities scale than white mothers ($\beta = .038, p < .050$). Mother's age had a significant positive association with cultural activities ($\beta = .074,$

$p < .001$). For every year of mother's age, there is a 0.74 standard deviation increase on the cultural activity scale. Model 2 explained 7 percent of the variation in cultural activities.

In the full adjusted model, after controlling for child's grade level and school type, the effects of mother's education decreased but remained significant. Mothers with less than a high school diploma scored .051 standard deviations lower on the cultural activities scale than mothers with a high school diploma or some college ($\beta = -.051, p < .001$). A college degree or higher had the strongest association with cultural activities ($\beta = .155, p < .001$). One standard deviation unit decrease in a college degree or higher equaled a .155 increase on the cultural activities scale. Elementary school was also significantly correlated with cultural activities ($\beta = .056, p < .001$). The model fit did not change drastically with the addition of these variables.

Cultural Outings. Table 6 shows the OLS Regression results for cultural outings. The unadjusted model accounted for only 4 percent of the variation in cultural outings. Less than a high school diploma had a significant relationship with cultural outings ($\beta = -.068, p < .001$). Mothers with a college degree or higher scored .179 standard deviations higher on the cultural outings scale than mothers with a high school diploma or some college ($\beta = .179, p < .001$).

Model 2 explained 5 percent of the variation in cultural outings. The effects of mother's education increased for less than high school diploma ($\beta = -.071, p < .001$) after controlling for mother's socio-demographic factors. The associations for a college degree or higher decreased, but remained significant ($\beta = .166, p < .001$). Asian mothers scored .044 standard deviations higher on the cultural outing scale than white mothers ($\beta = .044, p < .001$). Hispanic mothers and mothers from another racial background also scored higher on the cultural outings scale than non-Hispanic white mothers ($\beta = .038$ and $.033, p < .05$ respectively).

The full adjusted model accounted for 8 percent of the variation in cultural outings. Mother's education was less significant after controlling for child's grade level and school type for less than a high school diploma and a college degree or higher ($\beta = -.069$ and $.140$, $p < .001$ respectively). Race remained significant for Asian mothers. The relationship remained the same for Hispanic mothers ($\beta = .038$, $p < .05$), while the associations increased for mothers from another racial background ($\beta = .038$, $p < .001$). Mother's age was also significant in the final model ($\beta = .059$, $p < .001$). Elementary school was the most important factor in the model ($\beta = .205$, $p < .001$). Mothers of children in elementary school scored .205 standard deviations higher on the cultural outings scale than mothers of children in high school. Middle school and school type also had significant relationships with cultural outings ($\beta = .106$ and $-.048$, $p < .001$ respectively). Mothers that reported an income of \$75,000 or more a year scored .027 standard deviations higher on the cultural outings scale than mothers who reported an income between \$50,000 and \$74,999 a year ($\beta = .027$, $p < .05$).

Group Activities. Table 7 shows the OLS Regression results for group activities. The unadjusted model explained 6 percent of the variation in group activities. Mother's education was significantly associated with group activities. Mothers with less than a high school diploma scored .155 standard deviations lower on the group activities scale than mothers with a high school diploma or some college ($\beta = -.155$, $p < .001$). Mothers with a college degree or higher scored .155 standard deviations higher on the scale group activities than mothers with a high school diploma or some college ($\beta = .155$, $p < .001$).

In model 2 of the regression analysis, I controlled for socio-demographic characteristics, which had a moderate effect on model fit. Model 2 accounted for 9 percent of the variation in group activities, a 3 percent increase from the previous model. The effects of mother's education

decreased after controlling for mother's socio-demographic characteristics for mothers with less than a high school diploma and a college degree or higher ($\beta = -.104$ and $.120$, $p < .001$ respectively). Mother's race was a significant factor when considering group activities. Both Asian and Latina women scored lower on the group activities scale than non-Hispanic white women ($\beta = -.043$ and $-.101$, $p < .001$ respectively). Married mothers scored $.094$ standard deviations higher on the group activities scale than single mothers ($\beta = .094$, $p < .001$). Mother's age had a negative association with group activities ($\beta = -.060$, $p < .001$).

Model 3 accounted for 11 percent of the variation in involvement at school, a small increase from the previous model. When child's grade level and school type were entered into the full adjusted model, the relationship between mother's level of education and group activities weakened, but remained significant for mothers with less than a high school diploma and mothers with a college degree or higher with ($\beta = -.102$, $p < .001$) and ($\beta = .097$, $p < .001$) respectively. Mother's age, marital status and race remained significant in the final model, though child's grade level had the strongest relationship with group activities. Mothers of children in elementary school scored $.195$ standard deviations higher on the group activities scale than mothers with a child in high school. Though the correlation was lower for mothers of children in middle school, they were still significantly associated with involvement at school ($\beta = .118$, $p < .001$). One standard deviation unit increase in middle school equaled a $.118$ increase in group activities.

Homework Help. Table 8 shows the OLS regression results for homework help. The unadjusted model did not account for any variations in homework help. A college degree or higher was significant, but the relationship was weak ($\beta = -.027$, $p < .05$)

After controlling for socio-demographic characteristics, model fit increased. Model 2 explained 8 percent of the variation in homework help. Mother's education was significant in this model. Mothers with less than a high school diploma scored .044 standard deviations lower on the homework help scale than mothers with a high school diploma or some college ($\beta = -.044$, $p < .001$). A college degree or higher had a strong positive relationship with involvement at school ($\beta = .043$, $p < .001$). Black mothers scored .066 standard deviations higher on the homework help scale than non-Hispanic white mothers. Mother's age had a highly significant negative relationship with homework help ($\beta = -.264$, $p < .001$). Mother's employment status was also significantly associated with homework help, but the correlations were relatively weak ($\beta = .038$, $p < .05$).

Model 3 explained 21 percent of the variation in homework help, a 13 percent increase from model 2. When child's grade level and school type were entered into the full adjusted model, the association weakened, but remained significant for less than a high school diploma ($\beta = -.043$, $p < .001$). A college degree or higher was not significant in the final model. The effects of race increased for Black mothers ($\beta = .068$, $p < .001$). The associations decreased for mother's age, but remained significant ($\beta = -.058$, $p < .001$). Household income had a slight negative association with homework help ($\beta = -.028$, $p < .05$). Child's grade level had the strongest relationship with parent involvement at school. Mothers of children in elementary school scored .462 standard deviations higher on the homework help scale than mothers with a child in high school. The correlation was also significant for mothers of children in middle school, with mothers of children in middle school, scoring .294 standard deviations higher on the homework help scale than those with children in higher school ($\beta = .294$, $p < .001$). School type had a relatively weak positive relationship with homework help ($\beta = .034$, $p < .05$).

Discussion

The current study uses nationally-representative data to explore the relationship between mother's level of education and six types of parent involvement: parent involvement at school, parent volunteering, cultural activities, cultural outings, group activities, and homework help. Mother's level of education was significantly associated with every type of involvement except homework help. Having less than a high school diploma had a significant negative relationship with every type of involvement, while a college degree or high had a strong positive association with each type, with the exception of homework help. The findings are discussed for individual types of involvement below.

Parent Involvement at School. Mother's education was significantly associated with parent involvement at school. Using mother's education as an indicator of cultural capital, the findings suggest mothers with more capital in the form of a degree are more involved than mothers with lower levels of education. This is further supported by the negative association with less than a high school diploma. These support previous findings that parent's level of education is positively associated with parent involvement at school (Kohl et al., 2000; Bowen & Lee, 2006). Despite the significant relationship between mother's education and involvement at school, child's grade level was the most significant factor in the model. One explanation for this may be that many elementary schools request or require parents to be involved in the classroom. It is unclear whether parent involvement at school is more likely to be initiated by the school or by the mother, and this could explain why mother's level of education would be less significant when accounting for the grade level. One surprising finding was the relationship between school type and parent involvement at school. School type was negatively associated with involvement at school, indicating that parents are more likely to be involved at school if their child attends a

private school. This contradicts Mulligan's (2003) findings that public schools offer more formalized means of involvement at the school. However, Benveniste et al. (2003) assert that private schools increasingly have mandatory involvement for parents.

Parent Volunteering. As hypothesized, mother's level of education was correlated with parent volunteering. The effects were stronger for mothers without a high school diploma, indicating they are less likely than women with a high school or some college education to volunteer. Mothers with a college degree or higher were more likely to be involved with volunteering. The positive relationship between involvement and level of education indicates that mothers with higher levels of cultural capital are more likely to engage in the activities included in volunteering. Child's grade level was the most significant factor for parent volunteering, suggesting that parents are more likely to volunteer when their child is in a lower grade level. These findings indicate that parent volunteering may be best explored at the elementary level in order to avoid confounding effects.

This analysis produced several surprising results. The first was the significant negative relationship between school type and parent volunteering, suggesting that parents of children at private schools are more likely to volunteer than those with children in public schools. Once again, these findings contradict those of Mulligan (2003), but conforms to assertions put forth by Benveniste, Carnoy, and Rothstein (2003) who find that private and charter schools are increasingly resorting to mandating parent participation in schools, especially parental volunteer service. Black, Asian, and Hispanic mothers were all less likely than white mothers to volunteer, with Hispanic mothers as the least likely, followed by Asian mothers, and black mothers as the most likely. This support Sui-Chi and Willms' (1996) findings that black and Hispanic parents were more likely than white parents to engage in certain types of involvement centered around

the home, while white parents were more likely to be involved at the school. Some studies (Bowen & Lee, 2006) have suggested parents may feel more comfortable in a school setting if the teachers or administration are of a similar socio-economic background or the same race, which could be a possible explanation for this relationship. Another possible explanation is cultural differences. Parents from different cultural backgrounds, mothers especially, may also have varying parental involvement practices (Yamamoto et al., 2006).

Cultural Activities. Mother's level of education was the most significant factor in cultural activities for mothers with a college degree or higher, which supports previous findings that parents with more education are more likely to enroll their children in extracurricular programs like music lessons, educational camps or clubs, and math and computer programs (Eccles, 2005). In this study, cultural activities included music lessons, participation in performing or other arts, and whether or not the family had gone to theater in the past month. While going to the theater could be considered a cultural outing, a factor analysis and reliability test suggested trips to the theater be included with the other two variables, and this could be because going to the theater would be supportive of the art the child is likely participating in and therefore these are related to one another. As art and music have traditionally been considered a part of high culture, the relationship between mother's education and cultural activities supports the idea that a mother's cultural capital affects the level of involvement and the type of involvement.

Cultural activities like music lessons or other performing arts may be more long-term, and this could explain the weak association with child's grade level. The relationship between cultural activities with child's grade level indicates children are more likely to participate in cultural activities in lower grade levels.

Though the association was somewhat weak, there was a significant positive relationship between race for black and Asian mothers and cultural outings. These findings suggest Asian mothers are more likely than white mothers to engage their children in cultural activities. These findings suggest that cultural differences may affect type of involvement, supporting the findings once more of Yamamoto et al. (2006).

Cultural Outings. As hypothesized, mother's level of education was significantly correlated with cultural outings. This indicates those mothers with a college degree or higher are more likely than mothers with a high school diploma or some college to take their children on outings that supplement the child's education. In terms of cultural capital, these findings suggest mothers with more cultural capital in the form of educational experience and degree are more involved in certain types of activities. Total family income was also significantly associated with cultural outings. While some public places like libraries or museums may be free, parents would likely have to drive or pay for transportation. Cultural outings are not typically included in the more cited parent involvement models (Epstein, 1995; Grolnick and Slowiaczek, 1994), but the findings in this study suggest that cultural outings may be a useful dimension of parent involvement.

One surprising finding from this analysis was the positive association between cultural outings and parents from another racial background. The findings suggest Hispanic mothers and mothers from another racial background are more likely than white mothers to go on cultural outings. These findings are surprising for two reasons: first, other races make up less than four percent of the overall population, and second, there are no previous findings to support these. Because other races make up such a small percentage of the U.S. population, it is unusual that parents from those backgrounds would be more likely than white parents to engage in certain

activities. More testing would be necessary to draw any meaningful conclusions about this relationship.

Child's grade level was significant for elementary school, which indicates more children are involved in cultural outings at the elementary level. This supports the findings of Aliprantis and Dunne (2011) that some types of involvement are more likely during elementary school and decrease by middle school.

Group Activities. As hypothesized, mother's level of education significantly correlated with group activities for less than a high school diploma and a college degree or higher. As with the types of involvement, possessing less than a high school diploma was negatively associated with group activities, suggesting those mothers are less likely than mothers with a high school diploma or some college to involve their children in group activities. Mothers with higher levels of education have more cultural capital, and it is likely that they engage their children in activities with children from similar socioeconomic backgrounds. Mothers with a college degree or higher, as expected, were more likely to have children in group activities than those with less education.

Race was a negative factor for Hispanic and Asian mothers. Both Hispanic and Asian mothers were less likely to engage their children in group activities than non-Hispanic white mothers. One explanation for this may be cultural differences (Yamamoto, 2011). These effects could be explained by the variety of activities included in group activities. Organized sports, church activities, and scouting activities were included. In order to determine possible differences for races with group activities, further testing may be necessary to explore whether different racial groups are more likely to engage in a single activity over another.

The relationship between marital status and group activities was also positive, indicating married mothers are more likely than single mothers to engage their children in group activities. An explanation for this may be that group activities are those that require regular or long-term commitment, and this requires the parent to dedicate time and possibly other resources. Total household income was also significantly associated with group activities. While some activities, like church activities, may not require the parents to pay money to be involved, others, such as organized sports, may require parents to buy supplies related to the child's activities, so these results were expected. The positive relationship between group activities and incomes over \$75,000 a year support Lareau's (2002) findings that high-SES parents engage their children in more activities on average than low-SES parents.

Child's grade level was the most significant factor in the model for both elementary school and middle school. The values were higher for elementary school, which indicates that children are more likely to be involved in group activities in elementary school than high school. Middle school was also positively associated with group activities, though the relationship was weaker, which supports the findings by Aliprantis & Dunne (2011). School type was negatively associated with group activities, but the relationship was somewhat weak. This negative association also contradicts Mulligan's (2003) findings.

Homework Help. Homework help was the only type of involvement that did not have a significant relationship with less than a high school diploma and a college degree or higher. While a college degree or higher was not significant, mothers with less than a high school diploma were less likely than those with a diploma or some college to engage in homework help. Race was positively associated with homework help for black mothers, indicating they are more likely than white mothers to help with homework. Mother's age was negatively associated with

homework help, indicating that young mothers are more likely to help with or supervise homework than older mothers.

Child's grade level was highly significant for elementary school. This could be explained by the fact that many elementary schools require parents to check or supervise their child's homework, especially if the child is struggling (Eccles and Harold, 1996). Middle school was also significant associated with homework help, suggesting mothers are more likely to help with homework when their child is in middle school than those with children in high school.

Homework help is one variable where it would be necessary to know whether the parent or the school initiated the type of involvement. Some studies consider helping with homework as a part of a larger variable of help at home. Some have found helping with homework and forms of at-home involvement have positive effects (Kohl et al., 2000), while others have seen no effects of at-home involvement or homework help (Eccles, 2005), and in one study, negative effects (Eccles and Harold, 1996).

Limitations

Education itself is a form of cultural capital, and access to higher education may also introduce people to more social capital. As Darnell and Roscignio (1999), cultural capital can be difficult to measure. Therefore, the findings of the present study, while significant, would be more conclusive if multiple measures of cultural capital were included. It is difficult to determine the real relationship between parent's level of education and parent involvement without knowing which parent participated in a given activity. To compare the practices of mothers and fathers, it must be clear which parent was involved in a given activity. It is also important to consider whether the parent or the school initiates types of involvement. Therefore, parent or

school initiation should be considered in future analysis to draw any meaningful conclusions for certain types of involvement.

Research Implications

The largely significant findings in this study suggest a multitude of possible future research directions. While the primary independent variable in this study was mother's level of education, it may be prudent in future studies to consider parent's level of education in conjunction with which parent engages in certain activities. In this study I drew from Bourdieu's Forms of Capital and Habitus but was able only to use them as theoretical constructs rather than empirical measurements. When investigating *Habitus*, it is necessary to consider previous generations in order to determine whether parenting practices are shaped largely by past parenting practices. There is little evidence to suggest parents simply know how to become more involved or even value education without any influence. In order to fully test such a theory, in-depth information would be needed from parents to understand how values and practices are shaped, and whether it is the mother or the father who has the most influence over these values and practices. The findings for cultural activities and cultural outings indicated that further testing should be done to explore the relationship between mother's level of education and participation in cultural activities.

Conclusion

I used Pierre Bourdieu's theories of *Cultural Capital* and *Habitus* and prior literature on parent involvement to guide this study. Mother's education was used as a measure of cultural capital, and the theory of *Habitus* framed the argument for reproducing social status by way of systems of beliefs that translate into actions. Parents use their resources to guide these actions and represent their value of education. Using data from the 2007 NHES PFI survey, I

demonstrated through six OLS regression analyses that mother's level of education is not only significantly associated with different types of parent involvement, but also that the effects of mother's level of education and other characteristics vary for each type of involvement.

The overall findings of this study were significant for several reasons. First, this study focused on mother's level of education as one of the primary factors associated with parent involvement, while previous studies tend to focus on father's level of education or parents' combined level of education. Second, I used a large, nationally-representative dataset. Mother's level of education was significant for each type of parent involvement, though it was not significant in the final regression model for homework help. The findings support using a multi-dimensional model of parent involvement. Each type of involvement had a different relationship with the independent and control variables. Mother's level of education was consistently significant, except in the case of homework help. As many schools have policies that focus on increasing parent involvement, it is important to understand what factors may influence or act as a barrier to parent involvement. The findings in this study suggest that mother's level of education acts as more than just a socioeconomic factor. Parent involvement can be reliant on parent resources (Grolnick and Slowiaczek, 1994), and resources may extend beyond the economic. These findings support previous studies that have found a positive relationship between parents' level of education and parent involvement (Kohl et al., 2000; Bowen & Lee, 2006).

Tables.

Table 1. Descriptive Statistics for Independent and Control Variables

	<u>N</u>	<u>(%)</u>	<u>Mean</u>	<u>Std. Deviation</u>
Mother's Level of Education				
Less than HS	9422	7.7		
High School Diploma/ Some College	9422	53.3		
College Degree/ Higher	9422	39.0		
Mother's Race				
White	9422	65.5		
Black	9422	11.6		
Hispanic	9422	16.1		
Asian	9422	3.7		
Other	9422	3.1		
Mother's Age (18-65)	9037		41.2369	7.31415
Married	9422	78.3		
Total Family Income				
Less than \$50K	9422	35.8		
\$50,000-\$74,999	9422	22.1		
\$75,000 or more	9422	42.1		
Medicaid Recipient	9422	17.2		
Mother's Employment Status				
Unemployed	9422	20.0		
Child's Grade Level				
Elementary School	8726	40.0		
Middle School	8726	23.9		
High School	8726	36.1		
School Type (Public=1)	9422	86.4		
Total	8368			

Source: NHES: PFI Survey(2007).

Table 2. Descriptive Statistics for Types of Parent Involvement

	N	Mean	Std. Dev.
Parent at School	9787	2.1719	.87911
Parent Volunteer	9787	2.0789	1.19826
Cultural Activities	9787	.7241	.86565
Cultural Outings	9787	1.1236	.93003
Group Activities	9787	1.2902	.90018
Homework Help	9787	2.5960	.73277

Source: NHES: PFI Survey (2007).

Table 3. OLS Regression Results of Parent Involvement at School, Controlling for Mother's Race, Age, Marital Status, Total Household Income, Medicaid Recipient Status, Employment status, Child's Grade Level, and School Type (N=8368).

	1			2			3		
	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>
Mother's Education									
Less than HS	-.171	(.037)	-.051**	-.246	(.040)	-.073**	-.235	(.038)	-.070**
College or graduate	.173	(.020)	.097**	.183	(.021)	.102**	.106	(.021)	.059**
Mother's Race (White Omitted)									
Black				.215	(.031)	.079**	.223	(.030)	.081**
Hispanic				.162	(.028)	.070**	.164	(.027)	.071**
Asian				.125	(.049)	.029*	.088	(.047)	.021*
Other				.066	(.055)	.022*	.105	(.051)	.030*
Mother's Age									
				-.011	(.002)	-.135**	.001	(.002)	.009
Married (Yes=1)									
				.117	(.026)	.054**	.101	(.025)	.047**
Total Income									
Under \$50K				-.041	(.028)	-.022	-.027	(.027)	-.014
\$75K or more				.082	(.025)	.047*	.072	(.024)	.042*
Medicaid Recipient (Yes=1)									
				-.043	(.030)	-.018	-.041	(.029)	-.017
Mother's Employment									
Unemployed				.131	(.032)	.039**	.053	(.024)	.024*
Child's Grade									
Elementary							.593	(.024)	.334**
Middle							.343	(.024)	.168**
School Type (Public=1)									
							-.228	(.027)	-.089**
(Constant)	2.113	(.013)		2.621	(.066)		1.814	(.081)	
Adjusted R²	.014			.046			.121		

Source: NHES:PFI Survey (2007). *p<.05, **p<.001.

Table 4. OLS Regression Results for Parent Volunteering, Controlling for Mother's Race, Age, Marital Status, Total Household Income, Medicaid Recipient Status, Employment status, Child's Grade Level, and School Type (N=8368).

	1			2			3		
	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>
Mother's Education									
Less than HS	-.830	(.049)	-.180**	-.548	(.052)	-.119**	-.531	(.050)	-.115**
College or graduate	.502	(.026)	.205**	.340	(.028)	.139**	.241	(.027)	.098**
Mother's Race (White Omitted)									
Black				-.126	(.041)	-.036*	-.112	(.039)	-.033*
Hispanic				.272	(.037)	-.085**	-.263	(.035)	-.083**
Asian				-.282	(.064)	-.047**	-.314	(.061)	-.051**
Other				.090	(.071)	.004	.130	(.068)	.010
Mother's Age									
				-.011	(.002)	-.068**	.007	(.002)	.040**
Married (Yes=1)									
				.243	(.033)	.083**	.228	(.032)	.077**
Total Income									
Under \$50K				-.216	(.037)	-.085**	-.195	(.035)	-.077**
\$75K or more				.162	(.033)	.067**	.135	(.031)	.055**
Medicaid Recipient (Yes=1)									
				-.198	(.039)	-.060**	-.191	(.037)	-.057**
Mother's Employment									
Unemployed				.131	(.032)	.042**	.085	(.031)	.028*
Child's Grade									
Elementary							.620	(.031)	.254**
Middle							.152	(.032)	.054**
School Type (Public=1)									
							-.486	(.035)	-.139**
(Constant)	1.963	(.017)		2.366	(.085)		1.810	(.105)	
Adjusted R²	.091			.144			.207		

Source: NHES:PFI Survey (2007). *p<.05, **p<.001.

Table 5. OLS Regression Results for Cultural Activities, Controlling for Mother's Race, Age, Marital Status, Total Household Income, Medicaid Recipient Status, Employment status, Child's Grade Level, and School Type (N=8368).

	1			2			3		
	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>
Mother's Education									
Less than HS	-.247	(.035)	-.073**	-.176	(.040)	-.052**	-.173	(.040)	-.073**
College or graduate	.369	(.020)	.205**	.293	(.021)	.163**	.293	(.021)	.163**
Mother's Race (White Omitted)									
Black				.065	(.031)	.023*	.066	(.031)	.023*
Hispanic				-.024	(.028)	-.011	-.023	(.028)	-.010
Asian				.175	(.049)	.038**	.169	(.049)	.036*
Other				.065	(.054)	.014	.072	(.054)	.015
Mother's Age									
				.009	(.001)	.074**	.012	(.002)	.097**
Married (Yes=1)									
				.039	(.026)	.018	.036	(.026)	.017
Total Income									
Under \$50K				-.051	(.028)	-.028	-.048	(.028)	-.025
\$75K or more				.074	(.025)	.042*	.071	(.025)	.041*
Medicaid Recipient (Yes=1)									
				.002	(.030)	.001	.003	(.030)	.001
Mother's Employment									
Unemployed				.018	(.025)	.008	.011	(.025)	.005
Child's Grade									
Elementary							.100	(.025)	.056**
Middle							.058	(.025)	.028*
School Type (Public=1)									
							-.059	(.028)	-.023*
(Constant)	.616	(.013)		.201	(.065)		.085	(.084)	
Adjusted R²	.054			.067			.070		

Source: NHES:PFI Survey (2007). *p<.05, **p<.001.

Table 6. OLS Regression Results for Cultural Outings, Controlling for Mother's Race, Age, Marital Status, Total Household Income, Medicaid Recipient Status, Employment status, Child's Grade Level, and School Type (N=8368).

	1			2			3		
	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>
Mother's Education									
Less than HS	-.241	(.039)	-.068**	-.254	(.042)	-.071**	-.248	(.042)	-.070**
College or graduate	.338	(.021)	.179**	.312	(.023)	.166**	.264	(.023)	.139**
Mother's Race (White Omitted)									
Black				.055	(.033)	.022	.059	(.033)	.023
Hispanic				.086	(.030)	.038*	.087	(.029)	.038*
Asian				.208	(.052)	.044**	.184	(.051)	.039**
Other				.152	(.058)	.033*	.130	(.068)	.038**
Mother's Age									
				-.004	(.001)	-.030*	.008	(.002)	.059**
Married (Yes=1)									
				.003	(.027)	.002	-.009	(.027)	-.003
Total Income									
Under \$50K				-.053	(.030)	-.029	-.045	(.030)	-.025
\$75K or more				.057	(.027)	.030*	.052	(.026)	.027*
Medicaid Recipient (Yes=1)									
				-.039	(.032)	-.016	-.039	(.031)	-.016
Mother's Employment									
Unemployed				.029	(.026)	.012	.007	(.026)	.004
Child's Grade									
Elementary							.385	(.026)	.205**
Middle							.230	(.026)	.106**
School Type (Public=1)									
							-.130	(.029)	-.048**
(Constant)	1.014	(.014)		1.143	(.070)		.600	(.088)	
Adjusted R²	.042			.047			.074		

Source: NHES:PFI Survey (2007). *p<.05, **p<.001.

Table 7. OLS Regression Results for Group Activities , Controlling for Mother’s Race, Age, Marital Status, Total Household Income, Medicaid Recipient Status, Employment status, Child’s Grade Level, and School Type (N=8368).

	1			2			3		
	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>
Mother’s Education									
Less than HS	-.539	(.038)	-.155**	-.359	(.041)	-.104**	-.353	(.040)	-.102**
College or graduate	.287	(.020)	.155**	.221	(.022)	.120**	.178	(.022)	.097**
Mother’s Race (White Omitted)									
Black				.077	(.032)	.021	.080	(.031)	.022*
Hispanic				-.237	(.029)	-.101**	-.237	(.028)	-.101**
Asian				-.183	(.050)	-.043**	-.207	(.049)	-.048**
Other				-.001	(.055)	-.008	.023	(.055)	-.004
Mother’s Age									
				-.008	(.001)	-.060**	.003	(.002)	.025*
Married (Yes=1)									
				.209	(.026)	.094**	.198	(.026)	.089**
Total Income									
Under \$50K				-.060	(.029)	-.031	-.053	(.028)	-.027
\$75K or more				.069	(.025)	.037*	.066	(.025)	.036*
Medicaid Recipient (Yes=1)									
				-.048	(.030)	-.018	-.049	(.030)	-.018
Mother’s Employment									
Unemployed				-.009	(.025)	-.004	-.028	(.025)	-.012
Child’s Grade									
Elementary							.360	(.025)	.195**
Middle							.253	(.025)	.118**
School Type (Public=1)									
							-.079	(.028)	-.030*
(Constant)	1.245	(.013)		1.446	(.067)		.888	(.084)	
Adjusted R²	.059			.086			.111		

Source: NHES:PFI Survey (2007). *p<.05, **p<.001.

Table 8. OLS Regression Results for Homework Help, Controlling for Mother's Race, Age, Marital Status, Total Household Income, Medicaid Recipient Status, Employment status, Child's Grade Level, and School Type (N=8368).

	1			2			3		
	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>	<i>b</i>	(<i>se</i>)	<i>B</i>
Mother's Education									
Less than HS	-.019	(.032)	-.007	-.127	(.034)	-.044**	-.123	(.031)	-.043**
College or graduate	-.041	(.017)	-.027*	.066	(.018)	.043**	-.003	(.017)	-.002
Mother's Race (White Omitted)									
Black				.163	(.027)	.066**	.170	(.025)	.068**
Hispanic				.046	(.024)	.024	.043	(.022)	.022
Asian				.001	(.041)	.002	-.049	(.038)	-.011
Other				.023	(.046)	.010	.063	(.043)	.018
Mother's Age									
				-.028	(.001)	-.264**	-.006	(.001)	-.058**
Married (Yes=1)									
				.071	(.022)	.038*	.047	(.020)	.025*
Total Income									
Under \$50K				.016	(.024)	.009	.022	(.022)	.013
\$75K or more				-.051	(.021)	-.033*	-.042	(.020)	-.028*
Medicaid Recipient (Yes=1)									
				.025	(.025)	.012	.018	(.023)	.009
Mother's Employment									
Unemployed				.022	(.021)	-.033*	-.009	(.019)	-.005
Child's Grade									
Elementary							.707	(.019)	.462**
Middle							.518	(.020)	.295**
School Type (Public=1)									
							.073	(.022)	.034*
(Constant)	2.594	(.011)		3.642	(.056)		2.311	(.066)	
Adjusted R²	.000			.078			.212		

Source: NHES:PFI Survey (2007). *p<.05, **p<.001.

APPENDIX 1

Table 1A. Rotated Component Matrix for Parent at School and Parent Volunteering Factors

<i>Component</i>	<i>1</i>	<i>2</i>
	<i>Parent Volunteering</i>	<i>Parent Involvement at School</i>
<i>Parent-Teacher Org.</i>	.318	.521
<i>Parent-Teacher Meeting</i>	.169	.704
<i>Parent-Teacher Conference</i>	-.017	.791
<i>Class Event</i>	.513	.283
<i>Volunteer</i>	.728	.183
<i>Fundraise</i>	.636	.124
<i>Committee Member</i>	.717	-.009
<i>Cronbach's Alpha</i>	.602	

Source: NHES: PFI Survey (2007). (N=9787).

Table 2A. Cultural Activities, Cultural Outings, and Group Activities scale Factor Loadings

<i>Component</i>	<i>1</i>	<i>2</i>	<i>3</i>
	<i>Cultural Activities</i>	<i>Cultural Outings</i>	<i>Group Activities</i>
<i>Library</i>	-.059	.623	.202
<i>Bookstore</i>	.193	.634	-.056
<i>Museum</i>	.141	.660	.019
<i>Theater/Show</i>	.580	.163	.132
<i>Arts</i>	.739	.083	.020
<i>Music</i>	.664	.026	.074
<i>Church Activities</i>	.122	-.109	.696
<i>Scout or Club Activities</i>	.155	.062	.551
<i>Organized Sports</i>	-.059	.189	.607
<i>Cronbach's Alpha</i>	.390	.478	.346

Source: NHES: PFI Survey (2007). (N=9787).

Works Cited

- Aliprantis, D., Dunne, T., & Fee, K. (2011). The Growing Difference in College Attainment between Women and Men. *Economic Commentary*, 2011(21/22), 1-6.
- Aschaffenburg, K., & Maas, I. (1997). CULTURAL AND EDUCATIONAL CAREERS: THE DYNAMICS OF SOCIAL REPRODUCTION. *American Sociological Review*, 62(4), 573-587.
- Benveniste, Luis, Carnoy, Martin and Rothstein, Richard. (2003). All Else Equal: Are Public and Private Schools Different? Taylor and Francis: New York
- Bourdieu, P. (1977). Structures, Habitus, and Practices (R. Nice, Trans.). In *Outline of a Theory of Practice*. Cambridge; New York:: Cambridge University Press.
- Bourdieu, Pierre. (1986). *The Forms of Capital*. In Manza and Sauder(1st Ed.), *Inequality and Society* (pp 443-456). New York: WW. Norton & Company.
- Bowen, L., & Lee, Y.S. (2006). Parent involvement, cultural capital, and the achievement gap among elementary school children. *American Educational Research Journal*, 43 (2), 193-218.
- COLEMAN, J., CAMPBELL, E., HOBSON, c., MCPARTLAND, J., MOOD, A., WEINFELD, F. and YORK, R. (1966) *Equality of Educational Opportunity* (Washington D.C.: U.S. Government Printing
- Coyle-Shepherd, D. D., & Newland, L. A. (2013). Mothers' and fathers' couple and family contextual influences, parent involvement, and school-age child attachment. *Early Child Development & Care*, 183(3/4), 553-569. doi:10.1080/03004430.2012.711599.
- Crosnoe, R., Mistry, R. S., & Elder Jr., G. H. (2002). Economic Disadvantage, Family Dynamics, and Adolescent Enrollment in Higher Education. *Journal Of Marriage & Family*, 64(3), 690-702.
- DiMaggio, P. (1982). CULTURAL CAPITAL AND SCHOOL SUCCESS: THE IMPACT OF STATUS CULTURE PARTICIPATION ON THE GRADES OF U.S.HIGH SCHOOL STUDENTS. *American Sociological Review*, 47(2), 189-201.
- Dumais, S. A. (2002). Cultural Capital, Gender, and School Success: The Role of Habitus. *Sociology Of Education*, 75(1), 44-68.

- Durkheim, E. (1956). *Education and Sociology*. The Free Press.
- Eccles, J. S. (2005). Influences of parents' education on their children's educational attainments: the role of parent and child perceptions. *London Review Of Education*, 3(3), 191-204. doi:10.1080/14748460500372309.
- Eccles, J. S., & Harold, R. D. (1996). Family involvement in children's and adolescent's schooling. In A. Booth & J. F. Dunn (Eds.), *Family-school links: How do they affect educational outcomes?* (pp. 3-34). Mahway, NJ: Lawrence Erlbaum Associates.
- Eccles, J. S., & Harold, R. D. (1993). Parent-school involvement during the early adolescent years. *Teachers College Record*, 94(3), 568-587.
- Elmore, R. F. (1997, Fall97). The politics of education reform. *Issues in Science & Technology*. p. 41.
- Epstein, J. L. (1995). School/family/community partnerships. *Phi Delta Kappan*, 76(9), 701.
- Fan X, Chen M. Parental Involvement and Students' Academic Achievement: A Meta-Analysis. *Educational Psychology Review* [serial online]. March 2001;13(1):1-22. Available from: Academic Search Complete, Ipswich, MA. Accessed March 15, 2013.
- Fonzaelz-DeHass, AR, Willems, PP, and Doan Holbein, MF. (2005). Examining the Relationship Between Parental Involvement and Student Motivation. *Educational Psychology Review*. 17(2):99-123,
- Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' Involvement in Children's Schooling: A Multidimensional Conceptualization and Motivational Model. *Child Development*, 65(1), 237-252. doi:10.1111/1467-8624.ep9406130692.
- Hayes, D. (2011). Predicting Parental Home and School Involvement in High School African American Adolescents. *High School Journal*, 94(4), 154-166.
- Heath, S. (1984). LINGUISTICS AND EDUCATION. *Annual Review Of Anthropology*, 13251-274.

Kohl, G.O., Lengua, L.J., and McMahon, R.J. (2000). Parent involvement in school: Conceptualizing multiple dimensions and their relations with family and demographic risk factors, *Journal of School Psychology*, 38 (6), 501-523.

Lareau, A., & Weininger, E. B. (2008). Time, Work, and Family Life: Reconceptualizing Gendered Time Patterns Through the Case of Children's Organized Activities. *Sociological Forum*, 23(3), 419-454. doi:10.1111/j.1573-7861.2008.00085.x

Lareau, A. (1987). SOCIAL CLASS DIFFERENCES IN FAMILY-SCHOOL RELATIONSHIPS: THE IMPORTANCE OF CULTURAL CAPITAL. *Sociology Of Education*, 60(2), 73-85.

Lareau, A. (2002). *Invisible Inequality: Social Class and Childrearing in Black Families and White Families*. In Manza and Sauder(1st Ed.), *Inequality and Society* (pp 699-729). New York: WW. Norton & Company.

Lareau, A., and Horvat, E. M. (1998). Moments of Social Inclusion and Exclusion: Race, Class, and Cultural Capital in Family School Relationships. *Sociology of Education*, 72(1): 37-53.

Mandara, J., Varner, F., Greene, N., & Richman, S. (2009). Intergenerational Family Predictors of the Black-White Achievement Gap. *Journal Of Educational Psychology*, 101(4), 867-878. doi:10.1037/a0016644.

Mulligan, G. M. (2003). SECTOR DIFFERENCES IN OPPORTUNITIES FOR PARENTAL INVOLVEMENT IN THE SCHOOL CONTEXT. *Catholic Education: A Journal Of Inquiry & Practice*, 7(2), 246-265.

Parcel, TL and Dufur, MJ. (2001) Capital at Home and School: Effects on Student Achievement. *Social Forces* 79(3): 881-911.

Roscigno, V. J., & Ainsworth-Darnell, J. W. (1999). Race, Cultural Capital, and Educational Resources: Persistent Inequalities and Achievement Returns. *Sociology Of Education*, 72(3), 158-178.

Sui-Chu, E., & Willms, J. (1996). Effects of Parental Involvement on Eighth-Grade Achievement. *Sociology Of Education*, 69(2), 126-141.

Trivette, P., & Anderson, E. (1995). The effects of four components of parental involvement on eight-grade student.. *School Psychology Review*, 24(2), 299.