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Race and Ethnic Differences in Parent Time Spent on Children's Education

Zurishaddai A. Garcia
Utah State University

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RACE AND ETHNIC DIFFERENCES IN PARENT TIME SPENT
ON CHILDREN'S EDUCATION

by

Zurishaddai A. Garcia

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family, Consumer, and Human Development

Approved:

Jeffrey P. Dew, Ph.D.
Major Professor

Kathleen W. Piercy, Ph.D.
Committee Member

E. Helen Berry, Ph.D.
Committee Member

Mark R. McLellan, Ph.D.
Vice President for Research and
Dean of the School of Graduate Studies

UTAH STATE UNIVERSITY
Logan, Utah

2013

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ABSTRACT

Race and Ethnic Differences in Parent Time Spent
on Children's Education

by

Zurishaddai A. Garcia, Master of Science

Utah State University, 2013

Major Professor: Dr. Jeffrey P. Dew
Department: Family, Consumer, and Human Development

Academic achievement disparities exist across race and ethnic groups. Parents may be a good resource to their children for their educational success. Parental academic involvement is associated with student academic achievement across race and ethnicity. This study explored the relationship between race and ethnicity and parent time-use on children's education.

In addition to studying parental academic involvement across race and ethnic groups, the Latino American ethnic group was examined. Heterogeneity exists within race and ethnic groups. Understanding differences in parental academic involvement within the Latino American ethnic group is a step toward addressing education disparities across race and ethnic groups. The last aim of the study was to see if structural differences within families were associated with group differences.

The sample was obtained from the 2010 American Time Use Survey and included parents with household children younger than 18 years. Logistic regression results

indicated that race and ethnicity was associated with time spent on children's education. However, when the structural variables were accounted for, the race and ethnic differences became statistically nonsignificant. Many of the structural variables were associated with parent time spent on children's education. Parent demographics and other structural variables may make it more or less likely that parents spend time on their children's education.

Study findings also showed that for the Latino American subgroup, one group, Central/South Americans, look more likely to spend time on children's education. Puerto Rican parents were statistically significantly more likely to spend time on their children's education for one model tested, but not the other. Controlling for structural variables did not remove the association in the Central/South American group.

The results for the Latino American ethnic group analyses differed slightly from the race and ethnic group analyses. The results suggest that there are differences across groups regardless of parent demographics and family structure. The findings also suggest that teachers and school administrators may improve parental academic involvement by targeting programs to fathers and full-time employed Latino American families.

(73 pages)

PUBLIC ABSTRACT

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Academic success including high school completion is greatly important for today's youth. Greater opportunities, such as college and work acceptance, are available to youth who graduate high school. For this reason, the differences that exist in high school completion rate across race and ethnicity as a nation are a major concern.

Research shows an association between parents being involved in their children's education and students' improved academic achievement. Parents can play a role in their children's education and setting aside time to do so is a good place to start.

The present study used the American Time Use Survey to study the time that parents spend on children's education within a 24-hour period across race and ethnicity. A second goal of this study recognized research suggesting differences may exist in the subgroups of one race and ethnic group. In order to more fully understand the time that parents spend on children's education across race and ethnicity, this study focused in on the Latino American ethnic group.

Initial statistical analyses found differences in time spent on children's education across race and ethnicity. However, a major component of this study was the inclusion of family structure and parent demographic variables. These included, parent age and gender, household income, the number of children in the home, and other variables. When family structure and parent demographic variables were included, the analyses did not find differences in time spent on children's education.

The study results were different for the Latino American ethnic group. One group, Central and South Americans, had a higher likelihood of spending time on their children's education. This continued after the family structure and parent demographic variables were included in the analyses.

Overall, this study shows that parents are not likely to be different across race and ethnicity in the time they spend on children's education. Teachers and school administrators may use this information when seeking to improve parental academic involvement at school. Focusing on one race and ethnic group and viewing them as less involved may not be the best approach. This study found a few family structure and parent demographic indicators that may prove more efficient. Parents who could use guidance from schools to become more academically involved are fathers, employed parents, and parents who did not graduate from high school.

The findings from the Latino American ethnic group presented the Central and South Americans as being more likely to spend time on their children's education. Researchers, policymakers, teachers, and administrators can use this finding to see that differences exist among subgroups usually termed as being one umbrella ethnic category.

Future research seeking to learn about parental academic involvement in Latino American families may benefit from focusing on individual subgroups.

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Zurishaddai A. Garcia

DEDICATION

To my loving husband and children.

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CHAPTER I

INTRODUCTION

The nation as a whole has improved when it comes to the dropout rate of high school students. From 1972 to 2008 the dropout rate declined from 6.1% to 3.5% (Chapman, Laird, & KewalRamani, 2010). There are disparities, however, among the dropout rates of different race and ethnic groups. African Americans (6.4%) and Latino Americans (5.3%) had higher dropout rates than White-Non Latino Americans (2.3%) in 2008 (Chapman et al., 2010).

Pointing to an exact reason for this race and ethnic variation is a challenge. Understanding factors that lead to successful academic achievement may help. One factor that has been studied is parent involvement in the education of their children.

Parental academic involvement is defined as parents spending time on their children's education. Parents who take the time to help their children with schoolwork may be greatly enhancing their children's educational outcomes (Hoover-Dempsey et al., 2001).

Parental academic involvement has been thought to have a role in the race and ethnic educational disparities that exist (Moreno & Valencia, 2002). In the educational community, a deficit perspective has emerged. For example, Moreno and Valencia (2002) stated, "A major tenant of this deficit-oriented thinking was the belief that Mexican Americans, as a case in point, do not value education" (p. 228). Mexican Americans were thought to not care about their children's education and were viewed as

uninvolved. Programs sought to teach the importance of parental academic involvement and the “right way” to be involved.

Teachers and administrators have also viewed African American parents as being involved in their children’s education. Some teachers have reflected negative attitudes and believed that African American parents do not care about their children’s education (Trotman, 2001). Teacher-parent contact too often has been about children’s inappropriate behavior with no instruction or guidance on how to help the child (Trotman, 2001).

Much of today’s research demonstrates that parents of all race and ethnicities care about their children’s education (Hill et al., 2004; Hossain & Shipman, 2009; Ryan, Casas, Kelly-Vance, Ryalls, & Nero, 2010; Trotman, 2001). Traces of deficit-oriented thinking, however, are still present in the literature (Willson & Hughes, 2006). A shift in methodology has helped researchers understand parental academic involvement from a multicultural perspective (Moreno & Valencia, 2002; Romo & Falbo, 1996; Ryan et al., 2010; Zarate, 2007). These researchers have included race and ethnic culture as a factor in their studies.

While progress has been made to conduct more culturally sensitive research, the heterogeneity within ethnic groups has not always been properly represented. Overgeneralizations occur when heterogeneous racial and ethnic subgroups are placed into an umbrella ethnic category (e.g., Latino Americans, African Americans, Asian Americans; Fuller & Coll, 2010; Knight, Roosa, & Umaña-Taylor, 2009). The Latino ethnic group, for example, is comprised of many countries that cover two continents and

a number of islands. Dilworth-Anderson, Burton, and Turner (1993) discussing the heterogeneity of ethnic minority families stated, “There is tremendous variability both within and across minority groups with respect to their histories, current socioeconomic conditions, and cultural and contextual norms” (p. 240). The cultural and demographic differences that exist within race and ethnic groups should be represented as much as possible in research.

The present study examined parent involvement specific to the child’s education across different race and ethnic groups and across multiple Latino American groups. I used the American Time Use Survey (ATUS 2010) to study the time that parents spend with their household children doing education related activities. Educational activities included helping a child with homework or school project, quizzing a child before a test, observing a child’s class, attending school meetings and conferences, and homeschooling children (Bureau of Labor Statistics, 2010). I also performed analyses that accounted for the role of parent demographics and family structure such as income, employment, parent educational attainment, and family structure in the relationship between race and ethnicity, and parent involvement.

CHAPTER II

LITERATURE REVIEW

The present study was framed using findings presented in the literature on parental academic involvement across race and ethnic groups and within the Latino ethnic subgroup. The theoretical framework was Urie Bronfenbrenner's ecological systems theory.

Theoretical Framework

Ecological systems theory asserts that human development is dependent upon specific ecosystems or contexts (White & Klein, 2008). Urie Bronfenbrenner (1979) proposed a set of ecosystems that influence human development, they are: the microsystem, the mesosystem, the exosystem, and the macrosystem. Factors within these ecosystems may be associated with the amount of time that parents spend on activities involving their children's education.

The microsystem involves the interactions that take place between a developing person and individuals in a setting (Bronfenbrenner, 1979). One possible setting is a family's home where interactions occur between a parent and a child.

Within this system, parental academic involvement may be associated with children's academic success (Lee & Bowen, 2006; Seginer, 2006). Examples of home academic involvement include helping the child with homework, reviewing and signing homework, and listening to the child read. Parents' time spent on these activities is time spent towards shaping that microsystem.

The interactions that take place between two microsystems create a mesosystem (Bronfenbrenner, 1979). Within the mesosystem parents and schools can contribute to children's educational development (Hill et al., 2004; Lee & Bowen, 2006; Seginer, 2006). Parent time spent within the microsystem of their children's school may help them learn things they can take back to the microsystem of the home (Bronfenbrenner, 1986). Parent school involvement may include, attending parent-teacher conference, volunteering at school, and being in the school's Parent Teacher Organization (PTO).

The exosystem is made up of a setting or settings which do not include the child, but indirectly influence the child's development (Bronfenbrenner, 1979). For example, an exosystem setting may include a parent's work or social network. These external microsystems potentially influence the parent-child microsystem. The exosystem of a parent's work and household income are of particular importance in the present study. Work schedules may account for the amount of time parents are available to their children. A lack of substantial income may be associated with financial instability. This financial instability may in turn be associated with parent availability challenges.

Consistencies found in the other ecological systems create a culture or belief system called a macrosystem (Bronfenbrenner, 1979). The macrosystem includes parents' culture and social structure and may be associated with parents' involvement in children's education (Seginer, 2006). Culture may help explain the time that parents spend at home with their children developing the microsystem and at school creating a mesosystem. The macrosystem may be associated with parenting practices and school achievement (Spera, 2005).

The purpose of this study was to learn about parental academic involvement and to what degree it is associated with race and ethnicity. In addition, the study also looked at the degree to which parent time spent on children's education was associated with the different countries of origin of the Latino American ethnic group.

The ecological systems model is appropriate for studying parent involvement with their children, their children's education, and the race and ethnic diversity of families (Hossain & Shipman, 2009). Race and ethnicity along with social structure variables defined the parents' culture or macrosystem. The time that parents spend on their children's education represented the microsystem (e.g., at home activities) and the mesosystem (e.g., school involvement). Some of the structural variables also represented the exosystem. These were employment status and income. Together, these systems give us a picture of the factors that are most likely to be associated with parental academic involvement.

Parent Involvement in Children's Education

Parent involvement in children's education is associated with children's academic achievement (Hill et al., 2004; Hoover-Dempsey et al., 2001; Jeynes, 2007). That is, when parents spend time on their children's education, they may be contributing to their academic success. Parent involvement may be related to student achievement through modeling, reinforcement, and instruction, and in turn affect student attitudes, knowledge, and behaviors necessary for academic success (Hoover-Dempsey et al., 2001). For example, parents who are involved in their children's education may find that their children are more behaved at school (Hill et al., 2004). This may in turn foster good

academic achievement (Hill et al., 2004). Overall, parental academic involvement has a positive association with children's academic achievement (Jeynes, 2007).

Studies have not been consistent in the indicators chosen to represent parental academic involvement and academic achievement. This has created inconsistencies in the degree of their association (Fan & Chen, 2001). Fan and Chen (2001) performed a meta-analysis in seeking to bring clarity to the subject. They found that when parents' aspirations and expectations for their children's educational achievement was used as an indicator of parent involvement there was a greater relationship with students' academic achievement. The relationship was not as strong, however, when parental home supervision such as helping with homework was used to conceptualize parent involvement. Careful attention should be given to how parent involvement is defined when seeking to understand its relationship with children's academic achievement (Fan & Chen, 2001).

Overall the literature indicates that parental academic involvement is associated with student academic achievement. The majority of the literature reports a positive relationship. These findings carry-over when race and ethnicity is considered (Hill & Tyson, 2009; Jeynes, 2003).

Parent Involvement in Children's Education and Race and Ethnicity

Differences in parental academic involvement exist across multiple races and ethnicities (Wong & Hughes, 2006; Zarate, 2007). Culture may be associated with the time that parents spend on their children's education.

Parental Academic Involvement by Race and Ethnicity

Asian American parental academic involvement is based at home and is achievement focused. Education is highly valued and academic achievement is very much expected (Yamamoto & Holloway, 2010). Asian American parental academic involvement is structured (Chao, 2000). This structure is indirect and involves shaping the child's environment for optimal learning (Sy, 2006). Asian parents do engage in other types of educational involvement in the home, but mostly create limits for non-school activities and encourage the completion of homework (Hwa-Froelich & Westby, 2003; Mau, 1997; Sy, 2006).

Parental academic involvement of African American parents takes place at school and at home. African American parents have high educational aspirations for their children, including college attendance (Overstreet, Devine, Bevans, & Efreom, 2005). They play an active role in their children's education by communicating with schools (Wong & Hughes, 2006). African American parents see parent involvement as a shared responsibility with the teachers (Wong & Hughes, 2006). Therefore, schools' openness toward parents may be associated with African American parental academic involvement (Overstreet et al., 2005). Likewise teacher invitations for parents to participate may be associated with higher academic involvement at school and at home (Anderson & Minke, 2007). Home involvement consists of limiting television and play time as well as encouraging reading that is not school related (Lee & Bowen, 2006).

Latino American parents value their children's education (Ryan et al., 2010; Valencia & Black, 2002). They tell their children that education is the way to a better life

(Mena, 2011) and hold high standards for academic performance (Zarate, 2007). Talking to their children about school (Carreón, Drake, & Barton, 2005) and encouraging positive school behavior (Mena, 2011) are ways that Latino American parents are involved in their children's education. Involvement in homework is also important; Latino American parents ask about homework and sign it when needed (Zarate, 2007). They listen to their children read (Reese, 2002; Zarate, 2007), and help with homework as much as they can (Carreón et al., 2005; Mena, 2011; Reese, 2002). Significant others, especially siblings, help parents with children's education in Latino American homes (Reese, 2002; Ryan et al., 2010).

European American parents are involved in their children's education both at home and at school. Academic involvement at home takes place through educational discussions (Lee & Bowen, 2006) and informal teaching methods (Huntsinger & Jose, 2009). Informal teaching methods include board games, computer games, and workbooks. European American parents are often involved in their children's schools (Hill et al., 2004; Huntsinger & Jose, 2009; Lee & Bowen, 2006). They regularly volunteer in classrooms or visit the school (Hill et al., 2004). European American parents also attend parent-teacher conferences, open houses, and Parent-teacher Organization (PTO) meetings and activities (Huntsinger & Jose, 2009).

Parental academic involvement varies by race and ethnicity. Each race and ethnic group has their own way of being involved. Teachers and administrators may benefit from knowing how each group perceives parental academic involvement.

Teacher and Administrator Perceptions

Differences may exist in perceptions of parental academic involvement among parents, teachers, and administrators (Anderson & Minke, 2007). One example is that African American parents may be more likely to participate in the PTO and contact and visit the school than Asian American parents (Feuerstein, 2000). Parent involvement activities that are most visible to school personnel are the most recognized. Thus, volunteering, contacting the teacher, or being involved in the PTO may predict teacher perceptions of parents' involvement. Teachers and administrators might view the above mentioned African American parents as more involved than the Asian American parents due to their visibility in the school.

Parents' involvement practices may also receive less recognition when they deviate from the dominant culture's norm (Marschall, Shah, & Donato, 2012). Minority parents' lack of being involved in a certain way may lead teachers to conclude that some minority parents do not care about their children's education (Turney & Kao, 2009; Valencia & Black, 2002) and being academically involved (De Gaetano, 2007; Hill & Torres, 2010).

Barriers to Parental Academic Involvement

Barriers may sometimes impede parental academic involvement. Some barriers exist between schools and parents. Other barriers result from cultural differences and parent perceptions.

Differences in cultural perceptions may create barriers between parents and teachers. Teachers may find it easier to communicate with parents who share similar

beliefs and find it more challenging to relate to parents of different cultural ideologies and practices (Feuerstein, 2000). Some teachers may simply not know how to involve these parents (Greenwood & Hickman, 1991). Teacher contact may be challenging to parents who feel disempowered by the perception that the school lacks acceptance or affirmation of their cultural values (Yan & Lin, 2005).

The culture and environment of the school may affect parents. School composition may predict parental academic involvement. Schools with a higher composition of one race or ethnicity may find more parent involvement from parents of that race or ethnicity (Kerbow & Bernhardt, 1993 as cited in Feuerstein, 2000). Insensitive school personnel (Hill & Torres, 2010) and feeling unwelcome (Hill & Torres, 2010; Turney & Kao, 2009) may keep parents from school involvement.

Cultural values and beliefs, which place teachers as the experts and solely responsible for children's education at school, may be perceived as low parental academic involvement. Parents may feel that running the school should be left to the experts (Greenwood & Hickman, 1991; Hill & Torres, 2010). This is especially the case for immigrant parents who are from countries where teachers are given respect and viewed as the authority over education. Some parents feel powerless to influence their school (Hill & Torres, 2010). They may feel that they lack the knowledge to participate in the PTO or to volunteer in the classroom (Greenwood & Hickman, 1991).

Parents' personal educational experiences may predict their school involvement. Past educational failures may be associated with distrust in their children's teachers (Yan & Lin, 2005). Parental academic involvement may be challenging for these parents.

Conclusions may be drawn from the present literature. Parents across race and ethnicity see themselves as involved in their children's education. Still, teachers and school personnel often report that parent involvement varies by race and ethnicity. When barriers are considered, parents themselves find parental academic involvement to be a challenge.

Knowing the time that parents actually put towards their children's education may enhance the extant literature. The specific amount of time that parents spend being academically involved is not readily found in the literature. Time is a good indicator of parent involvement in their children's lives (Tubbs, Roy, & Burton, 2005) and was the main variable in the present study. A study of the time that parents of different races and ethnicities spend toward their children's education may add to the existing literature. Teachers and administrators often seek new ways to increase parental academic involvement. Knowing parents' perceptions of their own level of involvement may help.

Parent Involvement and Latino Americans

The focus of this study is on understanding parental academic involvement across race and ethnicity. Another goal of this research is to look at one particular ethnic group – Latino Americans. Studying one ethnicity provided insight into the different cultures found within that group.

Latino Americans (Latinos) are a heterogeneous people. Harwood, Leyendecker, Carlson, Asencio, and Miller (2002) listed differences among Latinos which make them diverse. The first is the fact that they come from different places of origin; Latinos come from about twenty different countries (Harwood et al., 2000) as well as throughout the

United States. The second is that these groups vary through history and personal experience when it comes to their arrival in the United States. Third, Latinos differ by socioeconomic status. This may include poverty level and educational attainment (Harwood et al., 2000). Another demonstrator of diversity within Latino Americans is level of acculturation or the “exposure to both the culture of origin and U.S. culture” (Harwood et al., 2000, p. 23). A final difference is that Latinos have varying beliefs and practices when it comes to parenting and childrearing.

Literature reporting on the parental academic involvement practices and perceptions of specific Latino groups is scant. What is available mainly covers the views of parents from different Latino groups on children’s education in general. Specific involvement activities or time spent is not readily reported.

Latino American ethnic group differences may be associated with parental academic involvement. Differences found between the Mexican American and Cuban American group is one example. Mexican American parents hold hope for their children’s education and worry for their academic future (Portes & MacLeod, 1996). Mexican American parents who become involved at school or who help with homework may do so to provide more opportunity for their children to succeed academically. Cuban American parents hold college attendance as an expectation (Portes & MacLeod, 1996). Cuban American parents may be very likely to be involved in their children’s education to ensure educational success.

The literature has presented specific parent academic practices for Puerto Rican Americans. Puerto Rican mothers help their children with homework (Antrop-Gonzalez,

Velez, & Garrett, 2005). They feel schools should be primarily responsible for educating children and teachers should be respected and not questioned (Hammer, Rodriguez, Lawrence, & Miccio, 2007). Puerto Rican parents do not visit schools as often as other parents, but they may be likely to be involved at home.

Schools, programs, and policies that seek to help specific populations may benefit from knowing ethnic group differences (Knight et al., 2009). Studying parental academic involvement in the Latino American ethnic group may bring to light new considerations for teachers and school personnel serving this population.

Structural Differences in Parental Academic Involvement

The variance expected in parents' academic involvement may be related to more than race and ethnicity. Demographic and structural characteristics of families may account for variance in parent time spent on activities related to children's education across races and ethnicities. These structural variables may include income, employment, parent educational attainment, parent gender, parent time in U.S., and family structure. As a whole or individually, these variables play a role in parents' environment. Each one may be associated with the time that parents are able to be academically involved at home and at their children's school. They may also contribute to the relation between race and ethnicity and parental academic involvement.

Income may be related to the amount of time that parents spend on activities involving their children's education. Financial problems due to limited income may decrease the interactions that parents have with their children at home and with teachers at school. Parents may be too overwhelmed with the worries of their challenging

economic conditions (Lopez, Scribner, & Mahitivanichcha, 2001). Teachers may see that financial problems limit parental academic involvement. Efforts made on behalf of teachers and administrators to partner with the community in order to meet the financial needs of their students' families have been related to improved parental academic involvement in those families (Lopez et al., 2001).

Whether or not a parent is employed and whether it is part- or full-time may also be associated with parental academic involvement. The time that parents are available to be engaged in educational interactions at home and at school may be related to employment status. The work schedule may be a challenge to parental academic involvement (Ji & Koblinsky, 2009; Lareau, 1987).

Parents' own educational attainment may be associated with the ability to be academically involved in their children's education (Lareau, 1987). A parent's education may influence how he or she feels about his or her own children's education. The amount of education attained may limit or enhance his or her ability to be involved. Thus parent educational attainment may predict the time that is spent with the child at home and with the teacher at school towards his or her education.

Parent gender may help predict the time that is spent on children's education. Mothers and fathers may differ in how they are involved. Fathers may be less involved at school, but just as involved as mothers at home (Shumow & Miller, 2001).

The amount of time that parents have been in the United States may also be associated with the time they spend on their children's education. Newly arrived immigrants may encounter language barriers which hinder communication with teachers.

At the same time, many immigrants come to the United States with great educational hopes for their children's future (Carreón et al., 2005). This may drive them to be more involved in their children's education. Parents who are second or third generation citizens may not be driven to the same extent.

One last structural component that may be related to the time parents spend on their children's education is family structure. Family structure involves the parental make-up in a family and the number of children that reside in the home. Parental make-up is the number of parents in the home, whether or not they are married, and whether or not they are the children's biological parent.

Parents' time and availability play a role in the association between their academic involvement and family structure. Single parents may spend less time with their children (Jeynes, 2005). These parents often have to work outside the home to support the family and there may not be an extra parent. The number of children that reside in the home may also be associated with the amount of time that parents have to spend on their children's education. Having more children in the home is associated with spending less time on children's education (Downey, 1995). Family structure may be associated with parental academic involvement.

Analyzing structural variables may make a difference in research. In studying parent involvement and the achievement gap, Lee and Bowen (2006) added free or reduced school lunch status and parent educational attainment to models that included race and ethnicity. These extra demographic variables added depth to the race and ethnic variables in the study. Both variables were associated with parent involvement and

student academic achievement. Free or reduced school lunch status and parent educational attainment accounted for differences in race and ethnicity. Race and ethnicity is sometimes included in research in a way that it becomes a barrier rather than an indication of culture. Adding demographic and structural variables when studying differences in race and ethnic groups may help to avoid this.

The Present Study

The present study examined parent time involvement in children's education and was defined by a number of indicators for parental academic involvement at home and at school. These indicators included activities such as: homework help, meetings and school conferences, home schooling, waiting associated with children's education, and activities related to children's education (Bureau of Labor Statistics, 2010). Teacher perceptions and many of the barriers to parental academic involvement presently discussed are important, however, the present study's data (i.e., the ATUS 2010 data) did not include this information.

The questions that guided this study and corresponding hypotheses were:

1. To what degree is race and ethnicity associated with the time that parents spend on activities related to their children's education?

H₁ Time spent on children's education will vary across race and ethnicity.

2. Do structural differences explain race and ethnic group differences?

H₁ Demographic variables, such as household size and parent academic achievement, are expected to decrease the variation across race and ethnicity.

3. To what degree is Latino American subgroup membership associated with the time that parents spend on activities related to their children's education?

H₁ Time spent on children's education is expected to vary within the Latino American ethnic group.

4. Do structural differences explain Latino American ethnic group differences?

H₁ Demographic variables, such as household size and parent academic achievement, are expected to decrease the variation across the Latino American ethnic group.

The first goal of the study was to understand the association between the time that parents spend on activities related to their children's education and race and ethnicity. Parents across race and ethnicity value their children's education and consider themselves involved, but they also recognize that barriers exist. Teachers and administrators also report variation in parent involvement. Previous studies led to the assumption that time spent on parental academic involvement varies across race and ethnicity.

The literature led to the following assumptions for parental academic involvement across race and ethnicity. Asian American parents influence their children's education most through their expectations and indirect involvement (Sy, 2006; Yamamoto & Holloway, 2010). They are expected to be less likely to spend time on their children's education at home and at school. Latino Americans spend time on children's education more directly, but may not be as involved in the school (Carreón et al., 2005; Mena, 2011; Reese, 2002; Zarate, 2007). Latino Americans are expected to follow Asian Americans in the time they spend on children's education. Additionally, Latino

Americans may benefit from family support to help with their children's education decreasing their involvement time (Reese, 2002; Ryan et al., 2010).

European Americans are involved at school and create informal educational activities such as board games in the home (Hill et al., 2004; Huntsinger & Jose, 2009). These informal activities, however, did not fall into the more formal educational activities measured in this study. European Americans are expected to spend more time on children's education than Asian and Latino Americans. Lastly, African American parents were expected to spend the most time. They are highly involved in their children's education both at home and at school (Anderson & Minke, 2007; Lee & Bowen, 2006; Wong & Hughes, 2006).

Including the structural variables in the present study allowed further investigation. By including these variables, race and ethnic groups were compared on a more equal plane. For example, family income was held constant as parental academic involvement was studied across the different race and ethnic groups. These structural variables were expected to account for some of the variation that race and ethnicity predicted. The degree to which race and ethnic group differences relate to parental academic involvement was expected to be statistically significant. However, this association was expected to decrease when the structural variables were accounted for.

The study also focused on the Latino American ethnic group and examined the time that parents spend on activities related to their children's education. The subgroups created were: Cuban Americans, Mexican Americans, Puerto Rican Americans, South and Central Americans, and Other Americans (e.g., Dominicans, Spaniards).

An understanding of the diversity within Latino groups led to the prediction that the time spent on parental academic involvement would vary across the Latino American ethnic groups. The structural variables were also analyzed for the Latino American subgroups. Variation between the Latino ethnic groups and parent time spent on children's education was expected to decrease as a result.

The results for the Latino ethnic group analysis were expected to reflect findings from the literature. Cuban American parents hold high expectations for educational attainment (Portes & MacLeod, 1996). They were expected to spend the most time towards their children's education. Mexican Americans were expected to be driven by a desire to see their children successful at school (Portes & MacLeod, 1996). Mexican Americans were expected to follow Cuban American parents. Puerto Rican parents do not usually participate at schools (Hammer et al., 2007), they were expected to spend the least amount of time involved out of the three mentioned groups. Little is known about the Central and South American and the Other Latino American group; there was not enough information to predict academic involvement.

CHAPTER III

METHOD

Data and Sample

Parental academic involvement across race and ethnic groups and the Latino American ethnic group was studied using the Bureau of Labor Statistic's American Time-use Survey (ATUS 2010). The survey provided a snapshot into how Americans spend their time in a day. Time in the ATUS 2010 is considered to be "clock" time; "a linear sequence or progression of activities" (Gershuny & Sullivan, 1998, p. 71). Respondents listed the activities they engaged in and the amount of time for the 24 hour period of the previous day.

The ATUS 2010 was nationally representative and obtained its sample from the Current Population Survey (CPS). Individuals who had fully completed the CPS were placed into a selection pool and then randomly selected to participate (Bureau of Labor Statistics, 2011). The individuals in the selection pool varied in age and not all were parents.

For the purposes of this study, only individuals 18 and older with children under the age of 18 in the household were included. The overall sample size for the race and ethnic group analysis was 5,651 (Table 1). The sample sizes by race and ethnic group were 3,678 European Americans, 935 Latino Americans, 620 African Americans, 270 Asian Americans, and 148 which were Other Americans (Table 1). For the Latino American ethnic group, the total sample size was 935. The Latino American ethnic

group sample sizes were 606 Mexican Americans, 187 Central and South Americans, 77 Puerto Rican Americans, 29 Cuban Americans, and 36 Other Latino Americans.

Data were obtained through time-use diaries. The selected individual was interviewed and he or she provided a 24-hour report from 4:00 a.m. the previous day to 4:00 a.m. on the interview day (Bureau of Labor Statistics, 2011). Questions involving how they spent their time, with whom, and where were also asked (Bureau of Labor Statistics, 2011). Time-use diaries have successfully been used in parent-child involvement research (Bianchi & Robinson, 1997; Milkie, Kendig, Nomaguchi, & Denny, 2010; Yeung, Sandberg, Davis-Kean, & Hofferth, 2001).

There were many time-use activities found in the ATUS 2010 including:

Table 1

<i>Sample Percentage by Race and Ethnicity</i>		
Variable	Whole sample (5,651)	Latino American Ethnic Group sample (935)
Asian American	4.80%	
African American	11.0%	
Latino American	16.50%	
Other American	2.60%	
European American	81.60%	
Puerto Rican American		8.20%
Cuban American		3.10%
Central/South American		20.0%
Other Latino American		3.90%
Mexican American		64.80%

personal care activities, caring for and helping household members, eating and drinking, and sports, exercise, and recreation. The present study analyzed time spent on activities related to children's education. These activities were found under the category of caring for and helping household members.

Measures

The following variables were used in the analyses (Table 2 for descriptive statistics). The dependent variable was the time that parents spent on activities related to their children's education. Many independent variables were chosen. The independent variables included race and ethnicity, Latino American ethnic group, family income, employment status, parent educational attainment, parent gender, parent age, family structure, parent time in U.S., and diary day.

Parent Time Use on Children's Education

Two dichotomous measures for the dependent variable parent time spent on children's education were created upon a priori inspection of the data. The dependent variable was highly skewed. For the race and ethnicity sample, the least amount of time spent on children's education was no amount of time (4,079 participants) and the most amount of time was 420 minutes (1 participant). The mean amount of time spent on children's education was 8.4 minutes with a standard deviation of 28.38. The data were similarly skewed for the Latino American ethnic group sample. As a result, two measurements of time were created.

Teachers and school administrators ask parents to read to their children at home

Table 2

Descriptive Statistics

	Mean	Std. deviation	Range
Spending at least 20 minutes	.13	.34	.00-1.00
Spending any amount of time	.17	.17	.00-1.00
European American	.82	.39	.00-1.00
Asian American	.05	.21	.00-1.00
African American	.11	.31	.00-1.00
Latino American	.17	.37	.00-1.00
Other American	.03	.16	.00-1.00
Puerto Rican American	.08	.28	.00-1.00
Cuban American	.03	.17	.00-1.00
Central/South American	.20	.40	.00-1.00
Other American	.04	.19	.00-1.00
Mexican American	.65	.48	.00-1.00
Parent age	39.33	10.95	18-85
Parent gender - female	1.60	.49	1-2
Family income	11.28	3.96	1-16
Full-time employment	.58	.49	.00-1.00
Part-time employment	.13	.34	.00-1.00
Parent educational attainment – less than high school	.12	.32	.00-1.00
Parent educational attainment – high school graduate	.42	.49	.00-1.00
Parent educational attainment – university graduate	.35	.48	.00-1.00
Married parents	.70	.22	.00-1.00
Cohabiting status	.05	.97	.00-1.00
Number of children	1.88	5.75	1-10
Immigrant entry year into U.S.	2.61	.50	0-21
Diary day - weekday	.50	.46	.00-1.00

and to be involved in their children's education. They often ask parents to spend at least 20 minutes a night reading to their children and/or helping them with homework. With

this suggestion in mind, the first measure became spending at least 20 minutes on children's education. Participants were divided into two groups. One group included parents who spent at least 20 minutes on their children's education (coded as 1). The other group contained parents who spent less than 20 minutes (coded as 0).

The second measure of time was spending any amount of time on children's education. This measure represents the recognition that any amount of time spent on children's education is better than no amount of time. Parents who spent any amount of time were put into one group (coded as 1) and parents who spent no amount of time were placed in the second group (coded as 0).

Race and Ethnicity

Five groups were formed to represent race and ethnicity. These groups included European Americans, Asian Americans, African Americans, Latino Americans, and Other Americans. European Americans are considered the majority race and ethnic group in the United States. For this reason they were chosen as the omitted variable in the analyses. A dummy variable was created for each of the remaining race and ethnicities. For each of the race and ethnic groups, participants who belonged to that race and ethnicity were one group (coded as 1) and all other race and ethnicities were the second group (coded as 0) for each dummy variable.

Latino American Ethnic Group

The Latino American ethnic group was made up of five Latino country origin groups. Those groups were Mexican Americans, Puerto Rican Americans, Cuban Americans, Central/South Americans, and Other Latino Americans. Mexican Americans

are the largest Latino group in the United States. Four dummy variables were created with Mexican Americans being the omitted group.

Family Income

The family income variable was measured in an ordinal scale with 16 income intervals. Lower numbers represented low income and higher numbers represented high income. The first interval was less than \$5,000 and the last interval was \$150,000 and over.

Parent Employment

The parent employment variable was converted into a dummy variable. Parent employment was measured as full-time employment, part-time employment, and not employed. The full-time and part-time employed participants each had a dummy variable with two groups in it. Not-employed participants were the omitted group.

Parent Educational Attainment

Parent educational attainment was measured by dividing participants into four groups. The groups were: less than high school, high school graduate, some college and associate's degree, and university graduate. Dummy variables were created for three of the parent educational attainment variables. The some college and associate degree group was the omitted group.

Parent Age and Gender

Parent age and gender were considered important structural variables. Parents older than age 18 were included in the study. Age was left as a ratio scale variable. The

parent gender variable was coded by having the number one represent males and the number two represent females.

Family Structure

Family structure was defined by whether or not a parent was married and the number of children in the home. In addition to marital status, cohabiting status helped to further define family structure. A marital status and a cohabiting status variable were formed into dummy variables. The marital status variable was divided into two groups. The first included all parents who were married (coded as 1) and the second included parents who were not married (coded as 0). The cohabiting variable was also divided into two groups in a similar fashion. The omitted variable for measuring marital and cohabiting status was single parents who did not have a cohabiting partner. The number of children parents had in their household was measured as a ratio scale.

Time in U.S.

The year the parents arrived to the United States was used to measure the amount of time that immigrant parents had been in the U.S. Parents who were not foreign-born were coded as zero. A code of 1 was given to parents who entered prior to 1950. Subsequent years were placed into intervals and the interval with the most recent years, 2008-2010, were coded as 21; the highest number.

Diary Day

The last variable that was included in the analyses was the diary day. The diary day was divided into two groups, weekend day and weekday. A dummy variable was

created. Weekend diary day was the omitted variable.

Data Analysis

Given the number and nature of the independent variables, multiple-logistic-regression analysis was used to analyze the data. Multiple-logistic-regression analysis allows for more than one independent or predictor variable to be correlated with the dependent or criterion variable. The interrelationships that exist between multiple variables are recognized through this analysis (Gall, Gall, & Borg, 2007). The purpose of the present study was to predict the time that parents spend on activities related to their children's education by knowing a parent's race and ethnicity. Studying race and ethnicity and time alone, however, would not be enough. A main tenant of the ecological systems theory is that there is more than one environment that influences development. Other predictor variables need to be considered and multiple-logistic-regression analysis allows for this.

Eight logistic-regression models were conducted to study parental academic involvement. Four of the models involved race and ethnicity and the other four involved the Latino American ethnic group. Within the four models, two of the models were used to measure time as spending at least 20 minutes. The other two measured time as spending any amount of time on children's education.

Multiple logistic regression measures the probability that a participant will be in the $Y = 1$ group of the dichotomous dependent variable (Cohen, Cohen, West, & Aiken, 2003). In other words, the probability that a parent spent at least 20 minutes on their children's education or for the other measure of time, the probability that a parent spent

any amount of time. The results of logistic regression are presented in coefficients and odds. These odds are a ratio of the probability that parents do fall into the $Y = 1$ group to the probability that they do not.

The coefficients produced in logistic regression represent the level and direction of the probability that $Y = 1$ when they are statistically significant. A positive coefficient shows there are higher odds that $Y = 1$. A negative coefficient shows that there are lower odds of $Y = 1$. The coefficient itself represents change in the log transition of the odds.

CHAPTER IV

RESULTS

Race and Ethnic Differences – At Least 20 Minutes Spent

The association between race and ethnicity and spending at least 20 minutes on children's education within a 24 hour period was examined through two models. The first contained race and ethnic groups alone. Model 2 added the structural variables.

Race and Ethnic Groups

When time spent on children's education was defined as spending at least 20 minutes or not spending at least 20 minutes, race and ethnic group differences did exist. Asian Americans were statistically significantly more likely than European Americans to spend at least 20 minutes on their children's education ($b = .57, p < .001$, Table 3, Model 1). The odds of spending at least 20 minutes were 77% higher for Asian Americans than for European Americans. Latino Americans were statistically significantly less likely to spend at least 20 minutes on their children's education ($b = -.29, p < .05$). Latino Americans' odds of spending at least 20 minutes were 25% lower than European Americans.

Adding the Structural Variables

When the structural variables were added, the differences between the race and ethnic groups were no longer statistically significant. Parent age was a statistically

Table 3

*Parent Time Spent on Children's Education: 20 Minutes or More Versus Less Than 20**Minutes – Accounting for Race and Ethnicity, and Structural Variables*

Variable	Model 1			Model 2		
	<i>b</i>	SE	Log odds	<i>b</i>	SE	Log odds
Intercept	-1.88***	.05		-3.67***	.42	
Asian American ^a	.57***	.16	1.77	.33	.22	1.39
African American ^a	-.10	.13	.90	.12	.17	1.12
Latino American ^a	-.29*	.12	.75	-.08	.17	.93
Other race/ethnicity ^a	.14	.24	1.15	.11	.29	1.12
Parent age				-.01*	.01	.99
Parent gender - female				.67***	.12	1.95
Family income				-.01	.02	.99
Employment						
Full-time ^b				-.31*	.12	.73
Part-time ^b				-.41*	.16	.67
Parent educational attainment						
Less than high school ^c				-.45	.25	.64
High school graduate ^c				-.08	.18	.92
University graduate ^c				.61***	.17	1.84
Marital status ^d				.51***	.14	1.66
Cohabiting status ^d				.28	.26	1.32
Number of household children				.21***	.05	1.24
Immigrant entry year into U.S.				.00	.01	1.00
Diary day - weekday ^e				.78	.10	2.19

^aOmitted category is White, Non-Hispanic; ^bOmitted category is Not employed; ^cOmitted category is Parent educational attainment – some college/associate degree; ^dOmitted category is Single marital status/not cohabiting; ^eOmitted category is A weekend day
 * $p < .05$; ** $p < .01$; *** $p < .001$

significant structural variable ($b = -.01, p < .05$, Table 3, Model 2). Each year increase in parent age was associated with a 1% decrease in the odds of spending 20 minutes on their children's education than younger parents. Parent gender was also statistically significant ($b = .67, p < .001$). Mothers had 95% higher odds of spending at least 20 minutes than fathers.

In addition to parent age and gender, the parent employment variables were also statistically significant. These variables were part-time and full-time employment and the omitted group was not employed. Full-time employed parents had 27% lower odds of spending at least 20 minutes on their children's education than parents who were not employed ($b = -.31, p < .01$). Part-time employed parents also had lower odds than parents who do not work; their odds were 33% lower ($b = -.41, p < .01$).

Parent educational attainment had one group that was statistically significant, this group was university graduates ($b = .61, p < .001$). University graduates had 84% higher odds than the some college/associate degree group of spending at least 20 minutes on their children's education.

The marital status variable was compared to the single not cohabiting parents variable. Marital status was statistically significant ($b = .51, p < .001$). Married participants had 66% higher odds than single not cohabiting parents of spending at least 20 minutes on their children's education.

The number of household children was associated with spending at least 20 minutes on children's education ($b = .21, p < .001$). As the number of children in the

household increased by one, the odds that parents spent at least 20 minutes on their children's education rose by 24%.

The last structural variable to be statistically significantly associated with parents spending at least 20 minutes on their children's education was the weekday diary day. Parents who reported on activities that took place during a weekday had 119% higher odds of spending time than parents whose diary day was during a weekend day.

Race and Ethnic Differences – Any Amount of Time Spent

After examining whether they spent at least 20 minutes, a second regression analysis compared parents who spent any time versus no time within a 24 hour time period. The same two models were examined. The first included the race and ethnic groups and the second added the structural variables.

Race and Ethnic Groups

Changing the time from at least 20 minutes spent on children's education to any time versus no time produced similar results for most race and ethnicities. The difference between the two regression analyses was African Americans. African Americans were statistically significantly less likely than European Americans to spend any time on their children's education ($b = -.26, p < .05$, Table 4, Model 1). The odds of spending less time were 23% lower for African Americans.

Asian Americans continued to be statistically significantly more likely to spend time on their children's education than European Americans ($b = .42, p < .01$). Asian Americans had 52% higher odds than European Americans. Latino American parents

Table 4

Parent Time Spent on Children's Education: Any Amount of Time Versus No Amount of Time - Accounting for Race and Ethnicity and Structural Variables

Variable	Model 1			Model 2		
	<i>b</i>	SE	Log odds	<i>b</i>	SE	Log odds
Intercept	-1.56***	.04	1.52	3.02***	.40	
Asian American ^a	.42**	.15	.77	.22	.21	1.24
African American ^a	-.26*	.12	.71	-.04	.16	.96
Latino American ^a	-.35**	.11	1.29	-.03	.15	.97
Other race/ethnicity ^a	.26	.21		.25	.25	1.29
Parent age				-.02***	.01	.98
Parent gender - female				.65***	.10	1.91
Family income				-.01	.01	.99
Employment						
Full-time ^b				-.27*	.11	.76
Part-time ^b				-.43**	.15	.65
Parent educational attainment						
Less than high school ^c				-.71**	.23	.49
High school graduate ^c				-.20	.16	.82
University graduate ^c				.64***	.15	1.90
Marital status ^d				.51***	.13	1.66
Cohabiting status ^d				.30	.24	1.35
Number of household children				.21***	.01	1.23
Immigrant entry year into U.S.				-.01	.09	1.00
Diary day – a weekday ^e				.83	.40	2.30

^aOmitted category is White, Non-Hispanic; ^bOmitted category is Not employed;

^cOmitted category is Parent educational attainment – some college/associate degree;

^dOmitted category is Single marital status/not cohabiting; ^eOmitted category is A weekend day

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

were statistically significantly less likely than European Americans to spend any time on their children's education ($b = -.35, p < .01$). The odds were 29% lower.

Adding the Structural Variables

In this second regression analysis, which looks at any time versus no time spent on children's education, the addition of the structural variables also took away the race and ethnic differences. The structural variables that were statistically significant were similar to the first regression analysis. Parent educational attainment for parents who completed less than high school was the only difference.

Parent age was statistically significant ($b = -.02, p < .001$, Table 4, Model 2). Each year increase in parent age was associated with a 2% decrease in the odds of spending any time on their children's education than younger parents. Female parents were statistically significantly more likely than male parents to spend any time on their children's education ($b = .65, p < .001$). Female parents' odds were 91% higher than male parents.

The full-time employment variable was statistically significant ($b = -.27, p < .05$). Full-time parents have 24% lower odds of spending any time on their children's education than parents who are not employed. Parents who work part-time are also statistically significantly less likely to spend any time in a day on their children's education than parents who do not work ($b = -.43, p < .01$). The odds of spending any time on children's education are 35% lower for part-time employed parents than for parents who are not employed.

As previously mentioned, the parent education variable differed slightly in this second regression analysis. Parents who completed less than a high school education were statistically significantly less likely to spend any time on their children's education than parents who attended some college or obtained an associate's degree ($b = -.71, p < .01$). The odds of spending any time on children's education in a day for parents who did not complete high school were 51% lower. Parents who completed a bachelor's degree or higher were statistically significantly more likely to spend any time than parents who attended some college or obtained an associate's degree ($b = .64, p < .001$). University graduated parents had 90% higher odds of spending any time.

The married parent group was statistically significantly different from parents who were single and not cohabiting ($b = .51, p < .001$). Parents who were married had 66% higher odds of spending any time on their children's education.

Like the first regression analysis, the number of household children was statistically significant ($b = .21, p < .001$). As the number of children in the household increased by one, the odds that parents spent any time on their children's education rose by 23%.

The diary day variable of weekday was statistically significant ($b = .83, p < .001$). Parents whose diary day was during the week had 130% higher odds of spending any time on their children's education than parents whose diary day was during the weekend.

Latino American Subgroup Differences – At Least 20 Minutes Spent

The association between Latino American subgroups and time spent on children's education was examined with time measured as spending at least twenty minutes on

children's education. Two models were used. The first model included the Latino American subgroups alone and the second included the addition of the structural variables.

Latino American Subgroups

The Central/South American subgroup was the only Latino American subgroup that was statistically significantly different than Mexican Americans ($b = .71, p < .01$, Table 5, Model 1). Central/South Americans had 104% higher odds than Mexican Americans of spending at least 20 minutes on their children's education.

Adding the Structural Variables

When the structural variables were added, Central/South American parents were still statistically significantly more likely to spend at least 20 minutes than Mexican Americans ($b = .81, p < .05$, Table 5, Model 2). Central/South American parents had 125% higher odds than Mexican American parents of spending at least 20 minutes on their children's education.

Structural variables explained less of the variability for the Latino American ethnic group model than they did for the full sample. Only one structural variable was statistically significant for the Latino American ethnic group regression analysis. Females were statistically significantly more likely to spend at least 20 minutes on children's education than males ($b = .90, p < .01$). They had 147% higher odds than men of spending at least 20 minutes.

The diary day was also added to the analyses on the Latino American ethnic group. Weekday diary days were statistically significantly associated with spending at

Table 5

*Parent Time Spent on Children's Education: 20 Minutes or More Versus Less Than 20**Minutes - Accounting for Latino American Subgroups and Structural Variables*

Variable	Model 1			Model 2		
	<i>b</i>	SE	Log odds	<i>b</i>	SE	Log odds
Intercept	-2.4***	.15		-3.52*	1.14	
Asian American ^a	.62	.36	1.85	.33	.45	1.39
African American ^a	-.19	.75	.82	-.09	.83	.92
Latino American ^a	.71**	.25	2.04	.81*	.36	2.25
Other race/ethnicity ^a	.33	.55	1.40	.58	.69	1.79
Parent age				-.01	.01	1.00
Parent gender - female				.90**	.33	2.47
Family income				-.06	.04	.95
Employment						
Full-time ^b				-.47	.34	.62
Part-time ^b				-.67	.47	.51
Parent educational attainment						
Less than high school ^c				-.98	.58	.38
High school graduate ^c				-.25	.52	.78
University graduate ^c				.11	.58	1.11
Marital status ^d				.33	.33	1.39
Cohabiting status ^d				-.72	.80	.49
Number of household children				.01	.14	1.01
Immigrant entry year into U.S.				-.03	.02	.97
Diary day – a weekday ^e				1.54	.32	4.66

^aOmitted category is Mexican American; ^bOmitted category is Not employed; ^cOmitted category is Parent educational attainment – some college/associate degree; ^dOmitted category is Single marital status/not cohabiting; ^eOmitted category is A weekend day
 * $p < .05$; ** $p < .01$; *** $p < .001$

least 20 minutes on children's education. Parents who reported during the weekday had 366% higher odds of spending at least 20 minutes.

Latino American Subgroup Differences – Any Amount of Time Spent

Latino American subgroup membership was also examined with parents spending any time on their children's education versus no time at all. Two models were used. The first only contained the Latino American subgroups and the second included the addition of the structural variables.

Latino American Subgroups

Latino American subgroup differences did change slightly when parent time use on children's education was measured as spending any time versus no time. Puerto Rican American parents were statistically significantly more likely to spend any time than Mexican American parents ($b = .75, p < .05$, Table 6, Model 1). The odds of spending any time on their children's education were 112% higher for Puerto Rican American parents than for Mexican American parents. The Central/South American group continued to be statistically significant ($b = .70, p < .01$). Central/South American parents had 102% higher odds of spending any time with their children than Mexican Americans.

Adding the Structural Variables

The addition of the structural variables influenced some of the differences between Latino American subgroups. Puerto Rican Americans were no longer statistically significant, however the Other Latino American group became statistically

Table 6

Parent Time Spent on Children's Education: Any Amount of Time Versus No Amount of Time - Accounting for Latino American Subgroups and Structural Variables

Variable	Model 1			Model 2		
	<i>b</i>	SE	Log odds	<i>b</i>	SE	Log odds
Intercept	-2.17***	.13		-3.17*	1.04	
Asian American ^a	.75*	.32	2.12	.69	.39	1.99
African American ^a	-.43	.75	.65	-.28	.81	.76
Latino American ^a	.70**	.23	2.02	.79*	.33	2.21
Other race/ethnicity ^a	.75	.44	2.12	1.33*	.55	3.77
Parent age				-.01	.01	.99
Parent gender - female				.75*	.29	2.12
Family income				-.03	.04	.97
Employment						
Full-time ^b				-.64*	.31	.53
Part-time ^b				-.59	.42	.56
Parent educational attainment						
Less than high school ^c				-1.03	.55	.36
High school graduate ^c				-.25	.49	.78
University graduate ^c				.54	.53	1.71
Marital status ^d				.36	.31	1.44
Cohabiting status ^d				.14	.58	1.15
Number of household children				.08	.12	1.08
Immigrant entry year into U.S.				-.03	.02	.97
Diary day – a weekday ^e				1.28	.28	3.61

^aOmitted category is Mexican American; ^bOmitted category is Not employed; ^cOmitted category is Parent educational attainment – some college/associate degree; ^dOmitted category is Single marital status/not cohabiting; ^eOmitted category is A weekend day
 * $p < .05$; ** $p < .01$; *** $p < .001$

significant ($b = 1.33, p < .05$, Table 6, Model 2). The Other Latino American group had 277% higher odds than the Mexican American group for spending any time on their children's education. The Central/South American group was also statistically significant after structural variables were considered ($b = .79, p < .05$). The odds of spending any time with their children were 121% higher for Central/South Americans than for Mexican Americans.

Females were also statistically significantly more likely to spend time on their children's education when the measure of time spent was any time versus no time ($b = .75, p < .01$). They had 112% higher odds of spending any time than men.

A second structural variable became statistically significant when time was measured as parents spending any time versus no time on their children's education. Parents who worked full-time were statistically significantly different than parents who were not employed ($b = -.64, p < .05$). They had 47% lower odds of spending any time on their children's education.

Weekday diary day reports were statistically significant ($b = 1.28, p < .001$). Parents whose diary day was a weekday had 261% higher odds of spending any amount of time on their children's education than parents whose diary day was a weekend day.

CHAPTER V

DISCUSSION

The purpose of this study was to learn about the amount of time that parents spend on their children's education across race and ethnicity. In addition, I examined parent time spent on children's education within the Latino American ethnic group. To do this I created two measures of parental academic involvement, spending at least twenty minutes on children's education and spending any amount of time on children's education.

Race and Ethnic Groups

An association was found between time spent on children's education across race and ethnic groups regardless of the measurement for time used. Initially, these findings support the idea that the macrosystem of Bronfenbrenner's ecological system's theory is associated with parent time spent on children's education. The macrosystem represented parent culture in this study. Race and ethnic differences may exist in parental academic involvement (Lee & Bowen, 2006). However, after considering aspects of the other ecological systems, the differences attenuated.

Parent-child interaction takes place within the microsystem. Parents can be academically involved with their children in the microsystem of the home and the microsystem of their children's school. Time spent on children's education was associated with the family structure and parent demographics found within the microsystem.

Upon adding the structural variables to the analyses, the differences in the time spent on children's education among race and ethnic groups went away. A number of structural variables in the analyses accounted for the variation in the models. The statistically significant variables were age, gender, employment status, educational attainment, marital status, and the number of children in the household.

Older parents had slightly lower odds (about 2%) of spending time on their children's education than younger parents. Older parents may also have older children. Children may become autonomous as they reach middle school and high school and ask for less help. These parents may also feel unskilled to help children with their school work (Seginer, 2006).

Parent gender was also associated with the amount of time spent on children's education. The females in this study had higher odds of spending time on their children's education than did the males. Mothers are associated with being involved in their children's education at school more than fathers (Shumow & Miller, 2001).

Another variable associated with spending time on children's education was parents' educational attainment. Parents without a high school diploma were less likely to spend any amount of time on their children's education. Parents with bachelor's, master's, or doctorate degrees had higher odds of spending time on their children's education. Higher educated parents may be more likely to spend time on their children's education because of their own educational success. Higher educated parents are associated with having higher academic expectations of their children (Lee & Bowen, 2006).

Parents who were married had higher odds of spending time on their children's education. Married parents have the opportunity to share responsibilities in the home. This may provide for more opportunities to be involved in their children's education.

Finally, number of household children was also associated with spending time on children's education. Regardless of the measurement used for time, parents with more household children had higher odds of spending time on their children's education. This finding is surprising as in a previous study having four or more children in the household was negatively associated with children's educational attainment (Black, Devereux, & Salvanes, 2005). The present study suggests that having more children in the household is related to being more involved in children's education.

Parents who worked and the time they spent on children's education was associated with the exosystem. Working parents had lower odds of spending time on their children's education than parents who did not work. It may be that parents who do not work are more readily available to their children.

But this finding to some degree contradicts findings in another study. In studying the total time that parents spend with their children, Gauthier, Smeeding, and Furstenberg (2004) found that working was not related to parent-child time. Thus, the specific types of activities that parents engage in when devoting time to their children is of great importance. Parents who work may find it challenging to spend time on their children's education.

The findings suggest that structural variables accounted for the differences among the race and ethnic groups. The microsystem and the exosystem play a role in parent

time spent on children's education more than the macrosystem of race and ethnicity. These systems may be what teachers and school administrators can turn to when seeking to decrease the education achievement gaps that exist. This study does not find race and ethnic group membership to be the source of the differences in parental academic involvement.

Latino American Ethnic Groups

After analyzing race and ethnicity and parent time spent on children's education, the study focused on the Latino American ethnic group. I expected the macrosystem or culture within the Latino American subgroups to influence parental academic involvement. The group with origins from Central and South America was statistically significantly different than the other groups for both measures of time. Central and South Americans had higher odds of spending time on children's education. Further, in the analysis that examined spending any amount of time, the Puerto Rican American subgroup became different as well. Puerto Rican Americans were more likely to spend any amount of time on children's education.

I also added structural variables to the Latino American ethnic subgroup analyses. I hypothesized that the structural variables would remove any differences across the subgroups. These variables were chosen to represent components of the microsystem and the exosystem.

The microsystem and the exosystem were related to parent time spent on children's education, but not to the same extent as it did with the full race and ethnic group analyses. One variable, parent gender, accounted for variation in the second

models for both measurements of time. Working full-time was the only other variable to do the same and this was only true for one measurement of time.

Female parents had higher odds of spending time on children's education than male parents regardless of how time was measured. Similar to the race and ethnic group analyses findings, mothers were found to be more likely to spend time on children's education. Gender roles within the Latino American ethnic group culture help to explain this finding. Mothers in the Latino culture are often responsible for the care of the children (Bohon, Macpherson, & Atilas, 2005). In addition, as a result of this gender distinction and work, Latino fathers may not be as involved in children's education (Bohon et al., 2005).

Working full-time was associated with spending less time on children's education when time was measured as spending any amount of time. Working parents, overall, seem to have trouble finding time for parental academic involvement. The Latino American ethnic group is the largest minority population in the United States. New immigrants arrive yearly and the work that they are able to acquire is often hard and nonprofessional (Grzywacz et al., 2008). Such hard work may leave parents fatigued and may conflict with family time (Grzywacz et al., 2008).

I hypothesized that the structural variables would account for variation in the models and remove differences among the Latino American subgroups. This was not entirely the case. The Central and South American subgroup continued to be statistically significant after the structural variables were added. Puerto Rican American subgroup membership was no longer associated with parent time spent on children's education.

Lastly, the subgroup designated for all other Latino Americans became statistically significant.

Central and South Americans had higher odds of spending both any amount of time on children's education as well as at least 20 minutes. Because the literature on Americans with Central and South American origins and parental academic involvement is scant, this finding is an addition to the literature. Much of the literature that exists on the Latino American ethnic group speaks of Latinos as a whole. I defined Central American parents to be those originating from the countries of Central America excluding Mexico, which had its own group. Combining South Americans with Central Americans meant bringing 16 countries into one group. Something about the parents in that combination means higher odds of being academically involved. Future research is needed to understand this finding. Understanding the macrosystem or culture of Central and South American parents may be of some help.

The literature could also benefit from future research into the Other Latino Americans subgroup. When the subgroups were analyzed alone, this group was not significantly different. However, adding the structural variables to the model resulted in an association between the Other Latino American subgroup and parent time spent on children's education when time was measured as any amount of time. The variation accounted for by the structural variables seemed to bring forth higher odds of spending any amount of time in the Other Latino American subgroup.

This was a rare finding; typically an analysis that results as nonsignificant does not result as significant when structural variables are added. The Other Latino American

subgroup may have become significant due to sample size. This group had a small sample size. It also had a larger percentage of parents that were female than male. Female parents were more likely to spend time on children's education. This imbalance and the small sample may be the cause of this rare finding.

The findings for the Latino American ethnic group proved to be slightly different than expected. Little variation was accounted for from the variables which represented the microsystem and the exosystem. It may be that family structure does not influence parental academic involvement for Latino Americans as much as other race and ethnicities.

This study provides evidence for the importance of studying individual race and ethnic groups. When I studied Latino American subgroups alone without any other race and ethnic groups, differences were found. Structural variables did not completely take away these differences. Knowing what specific subgroups are doing to be involved in their children's education may help teachers and school administrators. Future studies may benefit from including subgroup differences found within specific race and ethnic groups in their research.

Weekday diary days were significantly associated with parent time spent on children's education. Parents who reported their activities during a weekday had higher odds of spending time on their children's education than parents whose diary day was during the weekend. This was true for all measures of time and models analyzed.

There are a variety of explanations for this finding. School takes place during the weekday and students often have homework to complete on school nights. When parents

volunteer at school they usually do so during a weekday. Teachers tend to be available during weekdays and not during weekends. Parent-teacher meetings are more likely to take place during weekdays. Lastly, weekends may be seen as leisure days for children and parents and education conversation topics may not be common.

This study adds to the parental academic involvement literature although it is not without limitations. Some of the limitations of the study include the final sample, generalizability, and interpretation of results.

The final sample used was limited to parents with children living within the household. Some parents have children living outside of the household. The time that these parents spend on their children's education along with possible barriers were not included in this study. The present study's focus was on the parent's environment and the time they spent on household children's education.

The ATUS over-sampled for Latino Americans and African Americans as well as households with children. I was unable to use post-stratification weights to account for this. Caution should be used when seeking to generalize the findings.

The nature of the analyses does not imply causation. The analyses provided the probability that the time would be spent as measured (e.g., spending at least 20 minutes on children's education, spending any amount of time on children's education) and whether that probability was different across race and ethnic groups and Latino American subgroups. The results of this study should be carefully interpreted.

Conclusion

Despite limitations, the present study has added to the present literature. High

school completion disparities are real. The literature shows that parental academic involvement is associated with student academic success. Parents are a valuable resource to their children and spending time on their education is like an investment for their future. The present study sought to understand where parents stand in the time they dedicate to their children's education across race and ethnic groups, and more specifically, within the Latino American ethnic group.

Teacher and school administrator efforts towards improving student success may benefit from parental academic involvement. Overall, parents were not much different in the time they spent on children's education across race and ethnicity. Race and ethnicity was not associated with higher or lower involvement. Targeting one race and ethnicity over another may not be the best approach to improving parental academic involvement. Parental academic involvement was associated with a number of structural variables that may be more accurate indicators of involvement level.

The present study points at a few areas that teachers and administrators can focus on when seeking to help parents become more involved in their children's education. Parents who could use guidance from schools to become more academically involved are fathers, employed parents, and parents who did not graduate from high school. Providing these parents with educational resources and ideas to become involved in their children's education may be a good first step to improving parental academic involvement.

Findings from the Latino American ethnic group analyses also add to the literature. One subgroup, Central and South Americans were more likely to spend time on children's education. Heterogeneity exists within the Latino American ethnic group.

Future studies seeking to learn about parental academic involvement in Latino American families may benefit from focusing on individual subgroups.

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