

2011

# Psychosocial Effects on Academic Performance

Aria Zhalet Higgins  
*Eastern Kentucky University*

Follow this and additional works at: <https://encompass.eku.edu/etd>



Part of the [Education Commons](#), and the [Psychology Commons](#)

---

## Recommended Citation

Higgins, Aria Zhalet, "Psychosocial Effects on Academic Performance" (2011). *Online Theses and Dissertations*. 21.  
<https://encompass.eku.edu/etd/21>

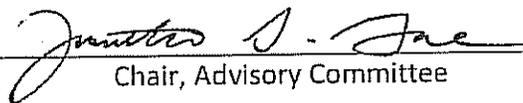
This Open Access Thesis is brought to you for free and open access by the Student Scholarship at Encompass. It has been accepted for inclusion in Online Theses and Dissertations by an authorized administrator of Encompass. For more information, please contact [Linda.Sizemore@eku.edu](mailto:Linda.Sizemore@eku.edu).

Psychosocial Effects on Academic Performance

By

Aria Z. Higgins

Thesis Approved:

  
Chair, Advisory Committee

  
Member, Advisory Committee

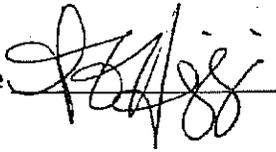
  
Member, Advisory Committee

  
Dean, Graduate School

STATEMENT OF PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a Master's of Science degree at Eastern Kentucky University, I agree that the Library shall make it available to borrowers under rules of the Library. Brief quotations from this thesis are allowable without special permission, provided that accurate acknowledgment of the source is made. Permission for extensive quotation from or reproduction of this thesis may be granted by my major professor, or in [his/her] absence, by the Head of Interlibrary Services when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this thesis for financial gain shall not be allowed without my written permission.

Signature

A handwritten signature in black ink, appearing to be 'J. A. [unclear]', written over a horizontal line.

Date

3/25/2011

Psychosocial Effects on Academic Performance

By

Aria Z. Higgins

Bachelor of Arts  
University of Kentucky  
Lexington, Kentucky  
2008

Submitted to the Faculty of the Graduate School of  
Eastern Kentucky University  
in partial fulfillment of the requirements  
for the degree of  
MASTER OF SCIENCE  
May, 2011

Copyright © Aria Z. Higgins, 2011  
All rights reserved

## DEDICATION

This thesis is dedicated to my parents  
as well as my extended family for always  
pushing me to succeed and achieve.

## ACKNOWLEDGMENTS

I would like to thank my professor, Dr. Jonathan Gore, for his patience and continued support through this whole endeavor. I would also like to thank the other committee members, Dr. Richard Osbaldiston and Dr. Theresa Botts, for their assistance and support in finishing my thesis. I would like to thank my mom, Andrea Bolton, for always having faith in me when I felt like giving up.

## ABSTRACT

Research has shown that academic performance can be affected by many variables, such as parental involvement, family rules, family resources and homework. The present study focuses on these variables and their association with academic performance using 3,932 participants from the National Education Longitudinal Study (NELS). Results showed positive associations between Parental Involvement and Family Resources on Homework, which also had a positive association with Academic Performance; Family Rules had a negative association with Homework, which resulted in a negative association with Academic Performance.

TABLE OF CONTENTS

CHAPTER	PAGE
I. Introduction .....	1
II. Literature Review .....	3
Relationships of Parental Involvement, Family Rules and Family Resources with Homework .....	3
1. Parental Involvement .....	3
a. Parenting Style .....	5
2. Family Rules .....	7
3. Family Resources .....	10
III. Homework and Academic Performance .....	14
IV. Homework’s Mediating Relationship with Academic Performance .....	17
V. Method .....	22
1. Participants .....	22
2. Materials .....	22
a. Parental Involvement .....	22
b. Family Rules .....	23
c. Family Resources .....	23
d. Homework .....	23
e. Academic Performance .....	24
3. Procedure .....	24
VI. Results .....	25
VII. Discussion .....	29
1. Summary of Results .....	29
2. Practical Implications .....	31
3. Limitations .....	32
4. Future Discussion .....	33
List of References .....	35

LIST OF TABLES

TABLE	PAGE
1. Bivariate Correlations of Parental Involvement, Family Rules, Family Resources, Homework and Academic Performance .....	26

## LIST OF FIGURES

FIGURE	PAGE
1. Hypothesized Relationships of Parental Involvement, Family Rules and Family Resources on Homework and Academic Performance .....	2
2. Linear Regression Relationships of the three Psychosocial Variables on Homework and Academic Performance .....	28

## CHAPTER 1

### INTRODUCTION

It is important for students to do well in school because this lays the foundation for their many accomplishments in life, such as furthering their education. Students who fail to complete their assignments and do not do well on their tests, affect their ability to move to the next grade level or hinder graduation. However, students are not alone in finishing school; their parents also play a pivotal role. Parents and students being able to work together motivate the students to do their best while in school. Thus, students who are able to meet their parents' expectations succeed in school. The National Education Longitudinal Study (NELS) was conducted in order to monitor how students perform over an extended period of time. With these data, researchers are able to determine which variables effect students in accomplishing their homework, variables that hinder the growth of self-esteem, and even those variables that deter a student from attempting their dream profession later in life. The focus of the current study is to determine how each of the following psychosocial variables is associated with homework: parental involvement, family rules and family resources. Furthermore, the researcher will also look at the association between homework and academic performance (refer to Figure 1).

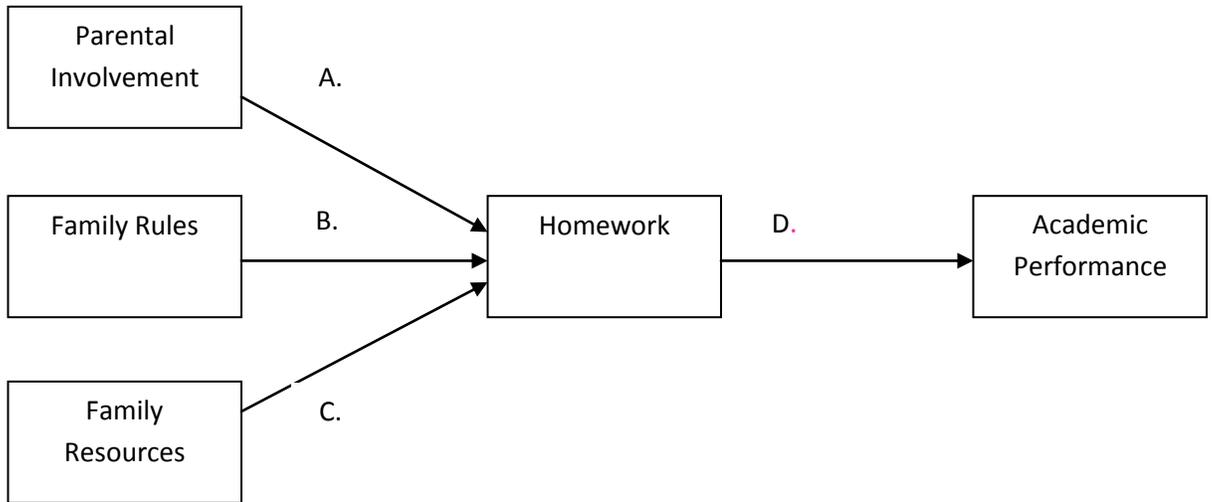


Figure 1. Hypothesized Relationships of Parental Involvement, Family Rules and Family Resources on Homework and Academic Performance.

## CHAPTER 2

### LITERATURE REVIEW

#### RELATIONSHIPS OF PARENTAL INVOLVEMENT, FAMILY RULES AND FAMILY RESOURCES WITH HOMEWORK

##### *1. Parental Involvement*

The development of parental involvement programs promotes high academic performance in children. Parental involvement can be defined as participating in the student's classroom as a helper to the teacher, or other students, and maintaining correspondence with the student's teachers (Dwyer & Hecht, 1992). This intervention bolsters the relationships between the school, teachers, parents and students, as everyone displays an active interest in the welfare of the student's academic success. Additionally, parental involvement reduces a student's potentiality to drop-out of school because they understand the amount of time their parents have invested in their success. Moreover, parental involvement includes the parent who provides a home environment which promotes structure and minimally aids the student during homework (Bowen & Bowen, 1998; Dwyer & Hecht, 1992; Hill & Tyson, 2009). Maintaining these relationships with the school proved to be essential to the student's academic success.

Parents who remain involved with their student's academic progress tend to encourage the completion of homework. An increase in the student's effectiveness towards completing their homework was found with an increase in parent involvement (Keith, Reimers, Fehrmann, Pottebaum & Aubey, 1986). The authors studied the direct and indirect effects of parental involvement and television viewing on homework. High school students were surveyed to determine how involved their parents, or guardians, were in their school careers. Questions on their survey included parents monitoring and recording how well their student(s) were doing in school. Other questions appealed to students that asked for their responses to if their parents had influenced their plans after graduation. Homework was measured along a scale similar to the one used for the current study, in that students approximated the average time spent they spent on homework in a week, with zero (0) being the least amount of time to five (5) being at least ten (10) hours or more spent on homework. The results supported a positive relationship between parental involvement and homework; therefore, parents have more of an impact on the academic career of their students than they are led to believe, which indirectly affects the grades earned by the student.

Parents who monitor their student's success without causing unnecessary strain are able to support the present hypothesis of a positive association. Studies found different forms of parental support, such as structurally sound educational activities in the home or taking frequent educational trips, promote an enhancement in academic performance. In addition, parental emphasis on the importance of academic

achievement produced an increase in homework achievement (Bowen & Bowen, 1998; Hill & Tyson, 2009). Students who feel their parents take an active interest in their education appear to excel academically because of this understanding.

a. *Parenting Style*

Finally, research findings reveal parenting style affects a student's academic performance (Dwyer & Hecht, 1992; Shaffer & Kipp, 2010; Taylor, Hinton & Wilson, 1995). Parenting styles influence the amount of time which a parent works with their student on homework, similar to what was stated earlier. Baumrind (1967) was the first to discuss parenting styles and defined three categories: *authoritarian*, *permissive* and *authoritative* (Baumrind, 1967).

The *authoritarian* parenting style is one in which the parent evokes a controlling attitude, all the while imposing high expectations upon the student but not assisting in meeting said expectations. Parents who demonstrate a *permissive* parenting style submit to the whims of their student, for example, this parent tolerates the student's declination of school and homework not being important, thus, the result of failing grades from the student. Finally, the *authoritative* parenting style is one in which parents and students work as a team. These parents implement rules and set expectations that are capable of being reached by the students, with the parent's assistance if needed.

Students who are raised in home environments that practice either an authoritarian or permissive parenting style received lower grades than those students who transpired from an authoritative home environment. The reason being these parents either take an overly active interest in their student's homework or have no interest at all. Therefore, students raised in an authoritative household have an open line of communication with their parents in which questions can be posed during homework without fear of being reprimanded (authoritarian) or being ignored (permissive). High academic performance results because of the positive interaction between parental involvement with their student on homework assignments.

For this reason, the current study will test the hypothesis that parental involvement and homework are positively correlated (Path A in Figure 1). Within this study, the definition of parental involvement is how involved students perceive their parents to be in their academic career, which includes discussions about high school preparation exams, such as the ACT and SAT. Parents who express the importance of exams such as these may have an effect on the student and their overall desire to understand their school work and homework assignments. In addition to school discussions, parents who are involved with their student's personal life can affect the student completing their homework. Being involved in their children's lives can possibly make parents aware of stressors such as the student not being able to understand a difficult concept being taught in class, friendships falling apart or puberty. Focusing on these stressors can prohibit one from completing tasks they have set for themselves.

Students who are able to voice their concerns about their stressors can talk out the problems they are having while allowing the parents to be involved as well. Parents can help develop ways to refocus their energy in order to achieve academic success in finishing their homework and understanding the taught concepts. The current study seeks to expand upon previous literature by broadening the definition of parental involvement and by examining parental involvement's unique association with their children's tendency to complete their homework while controlling for other psychosocial variables.

## *2. Family Rules*

Parents establish rules for their students in order to promote a sense of responsibility in regards to completing homework and achievement (Lin & Atkin, 1989). The results from Lin and Atkin (1989) support the fact that an increase in family rules promotes positive academic performance. For example, parents who allow their students to freely watch television, but do not stress the importance of school achievement, are not promoting a positive home atmosphere where completing homework assignments is pertinent. However, from Lin and Atkin (1989), students were not allowed to watch television until their homework had been completed. Therefore, parents who do not limit the amount of television their student watches decrease the importance of homework.

In addition to rules in regards to television viewing, computer use has increased over time with the advances in technology. Hunley, Evans, Delgado-Hachey, Krise, Rich

& Schnell (2005) looked at the relationship between computer use and non-school based activities on academic performance. One hundred and one high school students from social studies and science classes were asked to monitor and record their home computer use in one of several categories, such as word processing, playing games and emailing just to name a few. The students' recordings and grade point averages were analyzed to determine the relationship between the two variables; no resulting relationship was found between computer use and homework. However, the researchers did find that the percentage of students spending more time on the computer engaging in activities, such as visiting web sites and playing games, was higher than those using the computer for word processing and researching information for other school projects.

Along with non-school based computer activities, non-school based activities have an effect on a student completing their homework. A negative relationship was found between non-school based activities and grade point average (Hunley et al., 2005; Keith et al., 1986). Students who spent time watching television, talking on the phone with friends and listening to the radio performed poorly in comparison to their counterparts. Students who do not take the time to complete their homework are hindering the development of positive study habits for their future academic success. The time students spent participating in non-school based activities, which includes communicating with peers on the telephone, could be used to complete their homework and other related materials. During this time, students can read text for

their class or ask questions of their parents to help them understand information from the text. As a result, students gain knowledge about a subject with which they could possibly be struggling.

Developing rules that require students to read for a predetermined amount of time supports increased academic performance (United States Department of Education, 1997). The National Assessment of Educational Progress (NAEP) report supports the notion that good study habits impact a student's academic performance. Students from the fourth, eighth and twelfth grades were surveyed to determine how much time was spent on homework, if more than 20 pages were read in class and if school was discussed in the home with parents. Students who took their time to make sure their homework was completed and spent time reading at least twenty (20) pages developed good study habits, thus, promoting the possibility of parents enforcing a "required reading" rule in the home. Furthermore, these rules could be set forth as guidelines for the students to abide by as to complete tasks and projects in a timely fashion, or to participate in extracurricular activities.

Thus, past research supports the proposed hypothesis of family rules having a positive association with student's homework (Path B in Figure 1). However, studies have not included the possibility of families having rules that include completing household chores, prior to or proceeding homework completion. The inclusion of chores can potentially cause a student to develop a time-management schedule in order to complete homework and participate in non-school based activities. Before students

can participate in a desired activity, they understand what is being asked of them by parents. Additionally, past studies have not examined rules such as how early or how late television can be viewed or the computer is used; this study will include these factors. Students who use either of these resources late into the evening affect the amount of time they sleep, which ultimately affects their comprehension while in school. This study will examine the unique role of the implementation of these rules on students completing their homework, while controlling other psychosocial factors (i.e., parental involvement and family resources).

### *3. Family Resources*

In conjunction with parental involvement and family rules, homework can be influenced by family resources (Codjoe, 2007; McNair & Johnson, 2009; Taylor et al., 1995). Again, the researchers found that computer use is essential to students for homework completion (Hunley et al., 2005). On average, these students spent 4 hours a week completing homework with almost half of this time being used on a computer. Computer use was labeled into several different academic categories, researching information, word processing and reading the news for academic use. From this, results show at least half (46%) of the students used the computer to read the news and research other information. Students who do not have adequate familial resources to research information or simply use the word processor are more susceptible to have low homework performance.

In today's economy, being able to have access to a computer with the internet or a having a specific place to study is a luxury, but it is not always a possibility for some students. Therefore, there is a snowball effect with academic performance being dependent upon homework completion, which is becoming more dependent on technology, which can be dependent on family socioeconomic status (Codjoe, 2007). A student can complete his or her work with the materials given in class, but to potentially supersede the minimum and complete the assignment, having access to these items at home can make all the difference in the grades the student receives. However, not every parent is able to provide the in-home resources needed as monetary funds are limited.

Another important factor to include is that parents are not able to accompany their student to the library because of the necessity to work. This supports the fact that students from low socioeconomic status have a difficult time in completing their assignments because of the lack of in-home resources. In order to make up for this void of limited access, parents spent more time assisting their student in order to make sure concepts were understood, further reinforcing positive parental involvement (Dwyer & Hecht, 1992). A supportive household encourages the student to do the best they are capable of with the resources provided.

Additionally, those students who are from a home environment with sufficient resources are more likely to complete their homework tasks (Keith et al., 1986; Kitsantas & Zimmerman, 2009). Grades are the ultimate deciding factor in whether a student

graduates to the proceeding education level. Satisfactory marks indicate whether a student comprehends the information necessary for the next level. Students who take the time to complete their homework at home, positively affects their academic performance as the return grades have satisfactory marks.

However, family resources are not solely limited to having a computer in the home. Students also need a specific place to study that is separate from their bedroom. If students are forced to study in their bedroom, it is more likely that they will fall asleep rather study because they are comfortable. It may be possible that student's having a specified area in the home reinforces the notion that homework completion and comprehension are the most important issues at that current time. In addition, past studies did not take into account having access to a daily newspaper to remain up-to-date on current events or having a library in the home. Families that have at least a small collection of books and other reading materials promote the importance of reading and furthering education. I will take into account the accessibility of resources such as these, including other family resources such as a washer, a dryer and dishwasher, which promote an environment of organization for the family and the student. Studies have not observed the relationship between having a clean environment and its effect on homework. Most likely, a clean environment could aid in a student in completing their homework, as all materials could be quickly located and there is a specific place to return them when completed. It is important to examine this unique relationship between resources and homework; therefore, I hypothesize that

access to these academic resources in the household is positively associated with completing homework, while controlling for parental involvement and family rules (Path C in Figure 1).

## CHAPTER 3

### HOMEWORK AND ACADEMIC PERFORMANCE

Several studies have found associations between homework and academic performance. In some cases, more time spent working on homework may lead to low academic performance (Wagner, Schober & Speil, 2008). Other studies varied their definition of homework and achievement. One study defined the interaction as taking into account the student's ability and motivation and time to complete the homework (Cool & Keith, 1991). Another study defined the interaction as the amount of time spent completing the assignments (Cooper, 1989). From both of these studies, researchers found positive correlations between the two variables (Cool & Keith, 1991; Cooper, 1989). Homework can be defined in numerous ways, such as the amount of homework given by a teacher, the amount of time spent at home completing the assignments, or the amount of time studying for upcoming quizzes and exams.

In most cases, there is a positive correlation between homework and academic performance. Cooper (1989) showed a more significant association as the student advanced in school, with high school students exhibiting higher academic performance over elementary students. Potential causes for these results were high school students preparing for college and degree programs who are interested in grades and grade point averages of prospective students. Additionally, students who completed homework

assignments perform 69% higher than those students who are not given homework assignments (Cooper, 1989). Their performance was measured via grades given on assignments, quizzes and tests, supporting the posited hypothesis of homework substantiating high academic performance.

Students who spend more time on homework attain higher academic achievement as they are taking more time to comprehend and coordinate the information taught in class with the assignment (Keith, 1982). In Keith's (1982), high school seniors were asked to indicate if homework was assigned to them by their teachers and how much time was spent completing the homework assignments on a five-point scale. Academic achievement was measured by the grades reported on the homework assignments to increase accuracy. The results showed an association between homework study time and increased academic performance. This leads to the fact that homework can also assist in solving real-world scenarios. For example, percentages are used every day when shopping for personal items, such as groceries or clothing. Therefore, increased time in completing homework is positively correlated with high academic performance. These results support the notion that homework completion is important to high academic performance, and is sustained by the student's motivation to learn. Furthermore, this leads to the fact of students developing better study habits for in-class exams in addition to other academic tests, such as standardized tests, as a result of accountability and motivation.

However, to support my hypothesis of homework's positive relationship with academic performance (Path D in Figure 1), the factor of students completing their homework while in the classroom was added to this study. Students sometimes have "down time" in their classroom where teachers have completed their lecture for the day but the students must remain in the classroom until dismissal to the next class. At this time, teachers will distribute the homework assignments, thus allowing the students to have an early start in beginning, and possibly finishing, the assignment. There is a positive aspect to this in that those students who are having a difficult time comprehending the material are able to ask questions of their teacher to clarify any issues they have. In addition, if the teacher is not able to answer the questions posed by the student, they may be able to recommend remaining after school for additional help. Instances such as these can increase the relationship between homework and academic performance.

## CHAPTER 4

### HOMEWORK'S MEDIATING RELATIONSHIP WITH ACADEMIC PERFORMANCE

Most of the research discussed above has examined how psychosocial variables predict the completion of homework, but other studies have looked at how each of the three psychosocial variables is associated with academic performance. In Griffith's (1996) study, he studied the effect of parental involvement and empowerment on the academic performance of elementary students. To measure the parent's involvement, Griffith composed a questionnaire of 41 items from numerous surveys. Several items within these questionnaires included those which asked what programs the students participated in, special classes in which they were registered and if the parents participated in the school activities of their students. Higher levels of parental involvement produced higher increases in student academic performance; however, school demographics and socioeconomic status played a partial role in this academic increase. Other studies further looked at this association between parental involvement and academic performance.

Parental involvement in regards to academic performance does not begin at the elementary level; preschool students need this attention as well. Parental involvement was measured on a 4-point Likert scale from a teacher's perspective in regards to parents visiting the classroom, participation with the students in the activity for the day,

home visits and parent-teacher conferences, other than those conferences needed for report cards (Marcon, 1999). A high rating on the scale meant parents had multiple interactions with the teachers and students throughout the school year. Academic performance was measured via the Early Childhood Progress Report; skills listed on this report, such as social skills, listening and speaking, work with numbers and physical capabilities, or fine motor skills. The results showed an increase in student's mastering the skills listed on the Early Childhood Progress Report because of the parent's involvement in the classroom. In addition, parents who helped their student's development while at home also helped with this academic performance increase. Students who have involved and attentive parents excel in their academic studies.

In addition to parental involvement, family rules have shown to associate with an increase in academic performance. As stated earlier, Lin and Atkin (1989) found that those parents who implemented rules in regard to limiting the students watching television and using the VCR increased the academic performance. Likewise, Yamamoto and Holloway's (2010) literature review reported several studies to support the association between family rules, specifically parental expectations, and academic performance. Students who are aware of the expectations of their parents are more likely to try and achieve said expectations for themselves, as well as their parents. Thus, in turn, this motivational attempt increases student achievement. Again, an important factor that affected the outcome between these two variables was socioeconomic status and ethnic background. The authors found that families of certain ethnic

backgrounds have higher expectations than others. Along with parental involvement and family rules, the resources and student is privy to within the household increase academic performance.

Family resources are defined as being those items and settings in the household that aid the student. For example, dictionaries, newspapers and encyclopedias or a specific area to study are family resources made available to the student. Kim (2004) found that family resources, such as an encyclopedia, are important in increasing a student's academic performance. The downfall is that these resources are dependent on the family's socioeconomic status; if the parents do not have the income to supply these materials, the student potentially suffers academically. To combat this problem, parents involve themselves with their student's achievement. Parents work with the children and teachers, by explaining the lack of resources at home and asking the teacher for their input. The teacher then allows the student to remain afterschool to use those resources; this results in lowering the probability of low academic performance because the three groups have worked together to aid the student in achievement.

All three psychosocial variables presented and studied in this research positively associate with academic performance; however, in order for this association to occur, the variables are most likely associated with homework first. Parents who demonstrate positive, but minimal, involvement in their student's homework completion are nurturing the association with increased academic performance (Bowen & Bowen, 1998;

Dwyer & Hecht, 1992; Hill & Tyson, 2009). Parents who allow their students to maintain their voice when doing their homework are helping to promote a sense of individuality and motivating the student to finish the assignment. At the completion, the student then feels a sense of accomplishment because they were able to create answers with minimal help from their parent. This further supports the authoritative parenting style discussed by Baumrind (1967) in that homework completion is a team effort between the student and their parent. The rules that are developed by the team are then enforced by the parents.

Parents who enforce rules, such as the student completing household chores or limiting the use of the television for non-academic reasons, are attempting to help the child develop a sense of responsibility, amongst other important skills. Parents stress to the students the significance of homework completion by reminding them that it is important to finish their work and their chores, with the resulting reward being to engage in a non-academically based activity (Lin & Atkin, 1989). In addition, students from families such as these are able to develop time management skills in order to complete their homework in addition to manual work. The development of time management skills further aids in the development of study habits. Being able to study effectively and efficiently while completing homework is imperative for information retention, associating with positive academic performance.

Finally, resources within the household aid the student in completing their homework. Students who have access to items such as an encyclopedia or newspaper

helps when completing homework, for example homework that is history related (Codjoe, 2007; McNair & Johnson, 2009; Taylor et al., 1995). Technological resources are also essential to homework completion; technology endows the student with a larger database for them to be able to revise their homework more efficiently and in a smaller amount of time. This efficiency in homework then increases the academic performance of the student.

With the previous information, each of the psychosocial variables described in this literature thus far have had a positive association with homework, which results in a positive association with academic performance. Therefore, it seems that the association between the three psychosocial variables and academic performance can be explained by the increased levels of homework. However, no studies have looked at the potential mediating effect of homework on this association. For this reason, the current study will test the mediation effect of homework on the association between psychosocial factors and academic performance.

## CHAPTER 5

### METHOD

#### *1. Participants*

There were 6,602 participants, of those being students, their parents and principals of the schools where the data were collected (49% male and 51% female). Participants belonged to a clustered, stratified national probability sample of 1,052 public and private 8<sup>th</sup> grade schools; however, approximately only 3,932 participants were able to be used because of miscoding of academic performance, in regards to grade point average. Those students who had a grade point average greater than 4.0 were not included in the sample because their responses were miscoded; the highest grade point average a student can achieve is a 4.0.

#### *2. Materials*

*a. Parental Involvement.* Students were surveyed using a 9-item scale to assess how much they had involved their parents in their academics. Such items included discussions of courses, school activities, information studied in class, grades, preparation for the ACT/SAT, the possibility of going to college, job possibilities, current events and other troubling events. Participants indicated their parents' involvement on a 3-point scale (1 = *never*, 2 = *sometimes*, 3 = *often*). A summary score was created by computing the mean of all the ratings provided by the participants. High summary

scores coordinated with parents being more involved with their student ( $M = 2.021$ ,  $SD = 0.455$ ;  $\alpha = 0.86$ ).

*b. Family Rules.* Participants were asked to use a 2-item scale (1 = *yes*, 2 = *no*) to indicate whether or not there were family rules in regards to programs the student was able to watch, how many hours the student could spend watching TV, along with how many hours TV could be watched on school days, how early or late the TV could be watched, maintaining a certain grade point average, rules about doing homework and completing household chores. A count score was created by combining the total number of 1s indicated by the participants in regards to whether or not there were family rules. Higher count scores indicated there were more family rules ( $M = 4.940$ ,  $SD = 1.825$ ;  $\alpha = .696$ ).

*c. Family Resources.* A count score, the sum of all the items available to the student, was created in order to determine how many resources were available to the student participants, using a 2-item scale (1 = *have*, 2 = *do not have*). Students indicated whether or not their family had resources to fit the student's needs, such as a specific place to study, a daily newspaper, regularly received magazines, an encyclopedia and/or an atlas, a dictionary, a typewriter, a computer, an electric dishwasher, a clothes dryer, a washing machine, a microwave oven, a library with more than 50 books, a VCR, a pocket calculator and their own bedroom. Higher count scores indicated students being numerous resources in the home ( $M = 12.493$ ,  $SD = 2.697$ ;  $\alpha = .661$ ).

*d. Homework.* Students were asked to assess how much time was spent on completing their homework weekly, in school and out of school on different subjects,

such as English, mathematics, science and history (0 = none, 7 = 15+ hours). A summary score was created by finding the mean of all answers indicated by participants on an 8-item scale ( $M = 1.514$ ,  $SD = 0.779$ ;  $\alpha = 0.88$ ).

*e. Academic Performance.* Students were asked to record their level of academic performance based on their grade point average from the last year ( $M = 2.752$ ,  $SD = 0.696$ ).

### 3. Procedure

The base-year study of the National Education Longitudinal Study (NELS) was during the spring semester of 1988 when all of the student participants were in the 8<sup>th</sup> grade at either a public or private school, where nearly 25,000 students participated in this base-year study. The students were given a questionnaire to complete based in order to obtain some of the following information, activities, school experiences, and language proficiency.

Follow-ups were done every two years after the base study in 1988, 1990, 1992 and 1994. The final follow-up study was conducted in 2000 as the students had been out of school for eight (8) years and could verify if they continued their education or immediately went into the work force. During these follow-up interviews, the participants were asked how influential factors such as parental involvement and time spent on homework, were to their current academic state or occupation.

## CHAPTER 6

### RESULTS

To test the relationships among the variables, the researcher conducted a bivariate correlation analyses between Parental Involvement and Homework, Family Rules and Homework, Family Resources and Homework, Homework and Academic Performance, as seen in Table 1. The results showed that Parental Involvement and Family Resources are positively correlated with Homework ( $r_s = .147$  and  $.078$ ,  $p_s < .01$ , respectively); therefore, as parental involvement and availability of family resources increases, so does homework.

Additionally, Parental Involvement and Family Resources were positively correlated with Academic Performance ( $r_s = .203$  and  $.184$ ,  $p_s < .01$ ), meaning an increase in either of these variables results in an increase in academic performance of the student. Next, Homework was positively associated with Academic Performance ( $r = .167$ ,  $p < .01$ ), supporting the hypothesis of how completing homework affects overall academic achievement. Finally, Family Rules showed a negative association with Academic Performance ( $r = -.081$ ,  $p < .01$ ).

Table 1. Bivariate Correlations of Parental Involvement, Family Rules, Family Resources, Homework and Academic Performance.

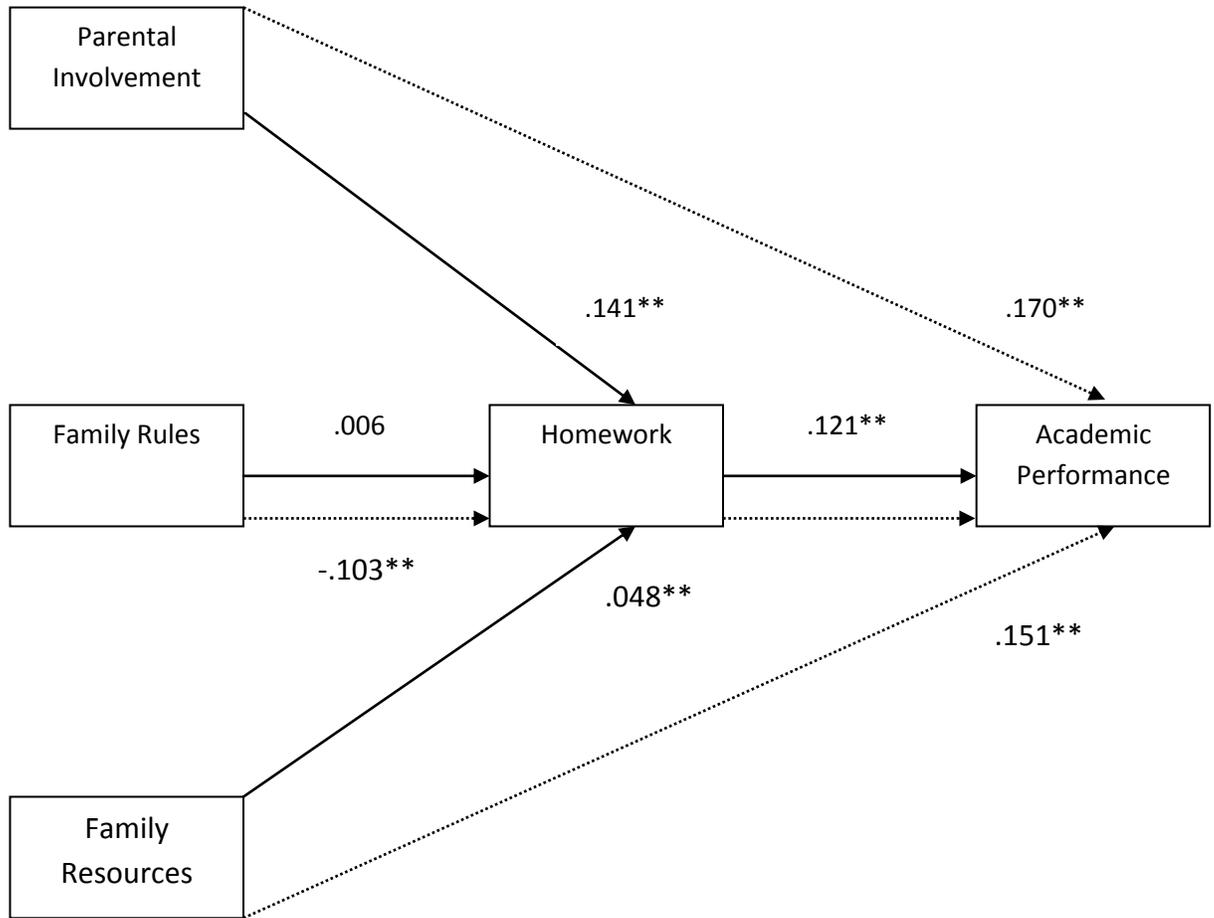
Variables	1.	2.	3.	4.	5.
1. Parental Involvement	---	.044**	.128**	.147**	.203**
2. Family Rules		---	.051**	.007	-.081**
3. Family Resources			---	.078**	.184**
4. Homework				---	.167**
5. Academic Performance					---

\*\* .  $p < .01$ .

To test the proposed model presented in Figure 1, the paths were tested using linear regression analyses. Consistent with the hypothesized model, Homework was predicted by Parental Involvement and Family Resources ( $\beta$ s = .141 and .048,  $p$ s < .01;  $R^2$  = .024). Contrary to the predicted model Homework was not predicted by Family Rules ( $\beta$  = .006, *n.s.*). In addition, Academic Performance was predicted by Homework ( $\beta$  = .121,  $p$  < .01;  $R^2$  = .090), supporting the hypothesis that homework completion and comprehension increases a student's academic achievement.

To test the mediation hypothesis, the results showed Parental Involvement and Family Resources to be positively associated with Academic Performance directly ( $\beta$ s = .170 and .151,  $p$ s < .01;  $R^2$  = .090). In contrast, Family Rules negatively correlated with Academic Performance ( $\beta$  = -.103,  $p$  < .01;  $R^2$  = .090), which disconfirmed the hypothesis of familial rules affecting a student's academic performance. This leads to the conclusion of the mediation effect not being supported by the results because of the psychosocial variables' direct associations to Academic Performance without the mediator Homework.

Therefore, the hypothesized model was generally supported by Paths A, C and D, but Path B did not support the model. Also, the hypothesis of Homework being the mediator between the three psychosocial variables and Academic Performance was not supported by the results from the linear regression analyses.



Note.  $^{**}p < .01$ .

Figure 2. Linear Regression Relationships of the three Psychosocial Variables on Homework and Academic Performance.

## CHAPTER 7

### DISCUSSION

#### *1. Summary of Results*

Parents who take an active interest in their student's academic performance are reinforcing the necessity for them to achieve in school. Results from this study support this relationship between parental involvement and homework, thus disconfirming the results from Hill and Tyson (2009). Ultimately, a student's future is dependent on the student themselves and their determination to achieve their highest educational goals, but having a supportive familial background is also important.

Students, who have open discussion with their parents about information taught or teaching practices, are fostering a relationship between the parent and the school. If the student is having trouble learning a concept being taught in class and the parent is privy to this information, the parent may be able to discuss this problem with the school's administration or the teachers in order to locate additional help for the student. Additionally, the development of different parental involvement programs promotes parents taking an active interest in their student's homework. These forms of help work in conjunction with the *authoritative* parenting style that Taylor, Hinton & Wilson (1995) discussed in that both the student and parent are jointly responsible for academic achievement. Students in a supportive household are more likely to place

more emphasis on their homework, the duration of time spent on the homework and its completion.

In addition, the positive relationship between family resources and homework supported the hypothesis. Students who are able to have resources in the household such as a computer, a specific place to study and complete homework or a dictionary, have a significant advantage over those students who do not have these resources (Hunley et al., 2005). Families with low socioeconomic status take the necessary steps to ensure their student is able to complete their homework by assisting with homework or taking them to the library to use those resources. Consequently, homework is able to be completed more efficiently resulting in the children being able to comprehend and retain information learned in class, overall increasing academic performance.

Furthermore, a relationship between homework and academic performance was supported in the results. Homework acts as a bridge between the information learned in class to information retained at home. As stated early, students who are given homework assignments are better able to develop better study habits to retain information. Thus, these study habits mitigate in helping the children perform more efficiently on future exams and quizzes, also supporting the study done by Keith (1982). This association between homework and academic performance continually remains with a student for the rest of their life. When applying to their college of choice and future job positions, a student's academic performance can effect whether they are able to attain their future career. A poor association between these two variables could

potentially withhold a student from gaining entrance into medical school, further preventing them from becoming a doctor.

Finally, contrary to the prediction, family rules were unassociated with student's homework and negatively associated with academic performance. From the results, it appears to be that students already have a high sense of responsibility in completing their homework without the addition of family rules, such as the monitoring the amount of television a student is able to watch throughout the week. Concurrently, as studied by Hunley and his associates (2005), the results of this study support the fact that time spent on the computer and academic performance are not associated. Therefore, students seem understand the importance of comprehending information taught in class in order to further succeed in the future, without further persistence of their parents. Additionally, the results found that homework was not a mediator of the three psychosocial variables associating with academic performance. This suggests that each of the variables has its own relationship with homework, which further predicts the student's academic performance.

## *2. Practical Implications*

With the associations found, parental involvement and family resources play a significant role in high student academic performance. In order to maintain these results, the implementation of parental involvement programs could potentially increase this association if tested again in the future. Within these parental involvement programs, parents could be given an outline of the different topics being

discussed in class in order to be informed of the progression of said class. Parents would then be able to attend class lectures to get first-hand experience of the issues or difficulties brought home by the student and ask for clarification from the teacher. Once these issues are brought before the teacher by the parents, both parties can begin to develop techniques to help the student overcome their academic obstacles. Thus, the students see the involvement by their parents and this displays their concern for the student's academic achievement.

In conjunction with parental involvement, parents are then able to explain to the obstacle of the students not being able to complete their assignments at home because of inadequate family resources. If the teachers permit the student to remain after school use its resources, both parties, the teacher and parent, can then develop a weekly schedule for the student to complete their homework at this time. This ability to use the additional resources would allow the student to be stress-free about completing their work while also being able to ask questions of the teacher if a problem arises while completing their homework. Within these two instances, the students are able to see their parents being involved with their academics by observing potential problems the students have at school while assisting them in making sure their homework is completed by asking to use resources at school.

### *3. Limitations*

There were several limitations to this study, the first being the data used for this study. The NELS data set that was used to determine the correlations between the

variables was collected 1988, approximately 20 years ago and no further information has been collected in such a manner to gather accurate correlations for today's society. In addition, the miscoding of information caused a slight problem. Many students were coded to having a grade point average higher than the maximum 4.0; therefore, approximately only half of the original sample was used in order to reduce the risk of outliers interfering with the results. Finally, other personal reasons a child would have to achieve academic success, such as internal or external motivation, were not discussed within this data set. However, it would be difficult to measure something of this capacity but these motivations could have possibly affected the results seen in this study.

#### *4. Future Discussion*

For future discussion, in conjunction with homework and academic performance, those students within in this data set who had "C" average or below could be studied to determine the validity of those students who perform poorly spending more time on their homework to support the researcher's hypothesis. Additionally, socioeconomic status was not reported within the NELS data, and it seems unlikely these participants can be located to gather this information, but for future references, this factor should be included to determine if it is significant in a student's academic performance. Furthermore, the inclusion of the effects of internal and external motivating factors, such as a student's parents not being able to finish school or wanting to provide for

family members who are ill, possibly being causes of a student's increase in homework and academic performance.

In sum, academic performance can ultimately be predicted by several factors along different paths. Parental involvement in the lives of their children, resources in the student's household and homework affect a student's academic performance. Parents who are involved with the child's academic career promote the development of individuality along with open lines of communication, in regards to potential stressors. In addition, resources that are available in the home enable the child in continuing their comprehension of concepts taught earlier in the day. Homework, in conjunction with the two previous factors, affects the overall performance of the student academically as the assignments and projects are graded by the teachers. With the inclusion of factors such as these, students are shown to surpass minimum requirements set forth by the school administration.

## LIST OF REFERENCES

1. Bowen, N. K. & Bowen, G. L. (1998). The mediating role of educational meaning in the relationship between home academic culture and academic performance. *Family Relations*, 47 (1), 45-51.
2. Codjoe, H.M. (2007). The importance of home environment and parental encouragement in the academic achievement of African-Canadian youth. *Canadian Journal of Education*, 30 (1), 137-156.
3. Cool, V.A. & Keith, T.Z. (1991). Testing a model of school learning: direct and indirect effects on academic achievement. *Contemporary Educational Psychology*, 16(1), 28-44.
4. Cooper, H. (1989). *Homework*, Longman, White Plains, NY.
5. Dwyer, D.J. & Hecht, J.B. (1992). Minimal parental involvement. *The School Community Journal*, 2(2), 53-66.
6. Griffith, J.(1996). Relation of parental involvement, empowerment, and school traits to student academic performance. *Journal of Educational Research*, 90 (1), 33-41.
7. Hill, N. E. & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, 45 (3), 740-763.

8. Hunley, S.A., Evans, J.H., Delgado-Hachey, M., Krise, J., Rich, T. & Schnell, C. (2005). Adolescent computer use and academic achievement. *Adolescence*, 40 (158), 307-318.
9. Keith, T.Z. (1982). Time spent on homework and high school grades: a large-sample path analysis. *Journal of Educational Psychology*, 74 (2), 248-253
10. Keith, T.Z., Reimers, T.M., Fehrmann, P.G., Pottebaum, S.M. & Aubey, L.W. (1986). Parental involvement, homework, and tv time: direct and indirect effects on high school achievement. *Journal of Educational Psychology*, 78 (5), 373-380.
11. Kim, H. (2004). Family resources and children's academic performance. *Children and Youth Services Review*, 26 (6), 529-536.
12. Kitsantas, A. & Zimmerman, B.J. (2009). College students' homework and academic achievement: the mediating role of self-regulatory beliefs. *Metacognition Learning*, 4, 97-110.
13. Lin, C.A. & Atkin, D.J. (1989). Parental mediation and rulemaking for adolescent use of television and VCRs. *Journal of Broadcasting & Electronic Media*, 33 (1), 53-67.
14. Marcon, R.A. (1999). Positive relationships between parent school involvement and public school inner-city pre-schoolers' development and academic performance. *School Psychology Review*, 28 (3), 395-412.
15. McNair, R. & Johnson, H.D. (2009). Perceived school and home characteristics as predictors of school importance and academic performance in a diverse adolescent sample. *North American Journal of Psychology*, 11 (1), 63-84.

16. Shaffer, D.R. & Kipp, K. (2010). *Developmental psychology: childhood and adolescence*. (8<sup>th</sup> Ed.). Canada: Wadworth/Cengage Learning.
17. Sheard, M. (2009). Hardiness commitment, gender, and age differentiate university academic performance. *British Journal of Educational Psychology*, 79, 189-204.
18. Taylor, L.C., Hinton, I.D. & Wilson, M.N. (1995). Parental influences on academic performance in African-American students. *Journal of Child and Family Studies*, 4 (3), 293-302.
19. U.S. Department of Education. (1997). Good study habits and academic performance: finding from the NAEP 1994 U.S. history and geography assessments. *NAEP Facts*, 2 (4), 3-6.
20. Wagner, P., Schober, B. & Spiel, C. (2008). Time investment and time management: an analysis of time students spends working at home for school. *Educational Research and Evaluation*, 14 (2), 139-153.
21. Yamamoto, Y. & Holloway, S.D. (2010). Parental expectations and children's academic performance in sociocultural context. *Educational Psychology Review*, 22 (3), 189-214.