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Factors Associated with Parental Involvement in their Child's Education

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2019

Abstract

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by

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MA, University of Colorado, 1996

BS, University of Oregon, 1991

Dissertation Submitted in Partial Fulfillment of

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Abstract

After 4 decades and a large body of research on children's academic success, there is still a need to understand how to increase children's academic performance. Researchers agree that the key component to elementary school children's academic success is parental involvement. However, little is known on how to increase parental involvement and the characteristics of the parents who participate in their children's education. This quantitative study examined 2 parental characteristics, parents' internal attachment patterns and parenting styles, and their relationship with parental involvement and children's academic success. Bowlby's theory of attachment and Baumrind's parenting typologies served as the theoretical framework. Parents who have a child between 7 and 11 years of age (n = 85) from two different western cities completed an online survey via Survey Monkey that consisted of Relationship Scales Questionnaire, Parenting Style Scale, the Parent and School Survey, and a Grade Questionnaire. Linear regression was used to determine if parental involvement mediates the relationship between parents' internal attachment patterns (independent variable Model A) and children's academic success and if parental involvement mediates the relationship between parenting styles (independent variable Model B) and children's academic success. The study found that parental involvement does mediate the relationship between parents' internal attachment patterns and children's academic success. Parental involvement also mediates the relationship between parenting styles and children's academic success. Positive social change includes having a better understanding for increasing academic performance for elementary school children.

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Dedication

I dedicate my dissertation to all the educators who dedicate their lives to ensure that every child achieves success in their academic careers as well as in life.

Table of Contents

Chapter 1: Introduction

Introduction

Numerous researchers have shared a common goal of showing the importance of parental involvement in order for children to succeed in school (Baker & RimmKaufman, 2014; Blair, 2014; Cote, Bouffard, & Vezeau, 2014; Friedman, Bender, Spieker, Keating, Scholnick, Vandergrift, Pasek, & Park et al., 2014; Hill & Tyson, 2009; Rytkonen et al., 2005; Trentacosta et al., 2008). However, it is largely unknown which parental characteristics, such as parental internal attachment patterns and parenting styles, are associated with parental involvement.

Academic achievement is consistently related to long-term productive health, social, and professional outcomes (Duncan et al., 2007; Lee, McInerney, Liem, & Ortiga, 2010; U.S. Bureau of Labor Statistics, 2010). According to the U.S. Department of Health and Human Services (2013), 4,478,000 children during the school year 2011-2012 were not academically successful across the United States and had to repeat a grade. Children who do not succeed in school often have behavioral issues, which lead to a higher risk of imperative societal issues later in life, including a poor quality of life resulting from a lack of job skills, and a lower income than children who succeed in school (Worley, 2007). In order to prevent these challenging outcomes and increase the number of children succeeding academically, it is necessary for researchers to acquire a better understanding of the factors that help to create academic success for children. One key factor study is the role that parents play in their children's education.

Parental involvement is important to children's academic success (Rytkonen et al., 2005). Hill and Tyson (2009) reported that across 50 studies, parental involvement was positively associated with children's achievement, with the exception of parental help with homework. Little is known about the motivation behind parental involvement (Green, Walker, Hoover-Dempsey, & Sandler2012). Green et al. (2012) also reported that there is little known about the characteristics of parents who are involved in their children's education. Blair (2014) showed that the most influential and most essential element to children's academic success is parental involvement; however, there is still a need to examine the relationship between parental characteristics and parental involvement in their children's education and children's academic success.

The purpose of this study was to examine parental internal attachment patterns, parenting styles, and parental involvement in relationship to children's academic success. I this study I found that two key parental factors in predicting parental involvement as well as children's academic success are parents' internal attachment patterns and parenting styles.

Numerous researchers have shared a common goal of showing the significance of parental involvement for children to succeed in school. However, it is largely unknown which parental characteristics, such as parental internal attachment patterns and parenting styles are associated with parental involvement. By addressing this gap in the literature, this study has increased the understanding of factors driving parental involvement in their child's education and ultimately their child's academic success. Through studying the parents' internal attachment patterns along with parenting styles, researchers and

educators can begin to understand some of the characteristics of parents who are motivated to be involved in their children's education.

The findings from this study have the potential of identifying parental characteristics of children who may be at risk of not succeeding in school. The findings from this study have the potential to provide information that can be used by educators and psychologists to design programs that will heighten parental involvement and increase children's academic success. The rest of this chapter discuss in detail the development of the study

Background

This study focused on the relationship between parental involvement, parenting styles, parental internal attachment patterns, and children's academic success. The three variables (parental involvement, parenting styles, and parental internal attachment patterns) and their effect on children's academic success are addressed individually. For example, the relationship between parental involvement and children's academic success is one body of literature and parenting styles and children's academic success is a second body of literature.

There is a large body of literature that shows a consensus that there is a direct link between parental involvement and children's academic success (Baker & RimmKaufman, 2014; Blair, 2014; Cote et al., 2014; Friedman et al., 2014; Hill & Tyson, 2009; Rytkonen et al., 2005; Trentacosta et al., 2008). Children perform better in school when parents express a positive interest in their children's education, from helping

their child with their homework to attending parent-teacher conferences or attending school

activities.

There is another body of literature that has shown that there is a strong link between parenting practices, such as parenting styles and children's academic success (Baker & Rimm-Kaufman 2014; Cote et al., 2014; Friedman et al., 2014; Trentacosta et al.2008). Maternal warmth, a major component of Baumrind's parenting styles (Baumrind, 1971), is strongly linked to children's academic success and children's selfesteem (Baker & Rimm-Kaufman, 2014; Newman, et al.., 2015; Stright & Yeo, 2014). Baumrind derived four different parenting styles or typologies using the constructs of parental warmth, parental control, parental expectations or demandingness, and communication (Baumrind, 1971). In addition to parental warmth, parental control, parental sensitivity, and parental demandingness play n important role in children's academic success (Newman et al. 2015; Su, et al., 2015; Uji, et al., 2014). The parentchild relationship plays an imperative role in the child's ability to succeed academically.

Another component of the parent-child relationship is parent-child attachment. Attachment theory was developed during the 1950's by Mary Ainsworth and John Bowlby. Their theory of attachment states that young children need a consistent, nurturing relationship with at least one primary caregiver in order for that child to develop into a mentally healthy adult (van Rosmalen, van Der Horst, & van Der Veer, 2016). According to van Rosmalen et al. (2016), a lack of parental sensitivity (a vital

component of parent-child attachment) to children's emotional and physical needs can contribute to psychopathology, disruptive behaviors, and poor academic performance.

In addition, attachment influences academic success (Bergin & Bergin, 2009: Frankel & Bates, 1990; Main, 1983; Moss & St-Laurent, 2001; Sroufe, 2005). Bergin and Bergin (2009) found that securely-attached children have better reading and math skills than children who are insecurely-attached. In this 2009 study, Bergin and Bergin discussed a study by Kerns et al. (2000) that found that a child's attachment to mother and father predicted academic skills in children who were third, fifth, and sixth graders. Bergin and Bergin (2009) also discussed a study by Aviezer (2002) that the child's attachment to his or her mother predicted the child's GPA and the child's scholastic attitude among Israeli sixth graders. In a 30-year longitudinal study, Sroufe (2005) demonstrated that attachment has a strong link to school success through the child's ability to accept and meet academic challenges with confidence. Attachment influences several factors, which are important for children's academic success. For example, a securely attached child is better able to explore his or her learning environment with confidence, and to self-regulate his or her emotions and behavior in a school setting (Brumariu, 2015; Kim & Page, 2013; Sroufe, 2005; van Rosmalen et al., 2016). The culmination of this line of research has demonstrated that parental warmth, parental sensitivity, parental control, and parental demandingness, which are major components in parent-child attachment and the major constructs of Baumrind's parenting typology, are also major constructs to consider when evaluating the relationship between children's academic performance and parenting styles. These studies on parental involvement,

parenting styles, and parent-child attachment align with each other in their findings that children's academic performance can be predicted by the quality of the parent-child relationship.

Numerous other researchers have discussed the strong connection between parental involvement and children's academic success (Blair, 2014; Green et al., 2012; Hill & Tyson, 2009; Nihat, Sad, & Gurbuzturk, 2013). Educators and practitioners have used this expansive body of research in order to implement programs that would increase academic success amongst students. Many educators have created programs at their schools in attempts to reach out to parents to increase parental involvement and ultimately enhance children's academic success. However, educators find it challenging to get parents involved in their children's education. Green et al. (2012) found that there is little known about the characteristics of the parents who are more involved in their children's education. There is a gap in the literature, which examines the characteristics of parents, who participate in their children's education. There is a lack of research that discusses the parent's relationship they had as children with their parents (parents' internal attachment patterns) and the effect of that relationship on their academic performance as children (Ainsworth & Bowlby, 1991; Bartholomew & Horowitz, 2002, Bretherton, 1992; Hazen & Shaver, 1987; Main, 1985; Pederson, et al.., 2014, van Rosmalen et al., 2016). In spite of the research on the relationship between parent-child attachment and children's academic success, a gap in the literature that examines the relationship between parents' internal attachment patterns and their children's academic performance exist. Another gap in the literature is the examination of how parental

involvement affects the relationship between parents' internal attachment and children's academic success and how parental involvement affects the relationship between parenting styles and children's academic success.

In spite of the large body of research as well as tremendous efforts of educators to motivate parental involvement to enhance children's academic success, many children in the United States are not succeeding and are failing in school. This study is needed in order to gain an understanding of how to increase parental involvement, which has been shown to have a direct effect upon children's academic success. The study's findings have the potential to help educators and researchers have a better understanding of the characteristics of parents who partake in their children's education, in order to understand what may be needed to motivate parents who find it challenging to partake in their children's education.

Problem Statement

In spite of a large body of literature demonstrating the impact of parental involvement on children's academic success, there is little known about the characteristics of parents who partake in their children's education (Green et al., 2012). In addition, there is little known about the obstacles for the parents who find it difficult to be involved in their children's education. There is not clear evidence in knowing how to increase parental involvement in our schools.

According to the U.S. Department of Health and Human Services (2013), 4,478,000 children during the school year 2011-2012 were not academically successful across the United States and had to repeat a grade. The root of academic deficiencies in

children aged 5-12 in the United States has not been clearly defined. Academic achievement is consistently related to long-term productive health, social, and professional outcomes (Duncan et al., 2007; Lee et al., 2010; U.S. Bureau of Labor Statistics, 2010). Children who do not succeed in school often have behavioral issues, which lead to a higher risk of imperative societal issues later in life, including a poor quality of life resulting from a lack of job skills and a lower income than children who succeed in school (Worley, 2007).

As mentioned above, numerous studies discussed the strong connection between parental involvement and children's academic success (Blair, 2014; Green et al., 2012; Hill & Tyson, 2009; Nihat & Gurbuzturk, 2013). In this study I examined the relationship between parental characteristics, such as parental internal attachment patterns and parenting styles, with parental involvement in their children's education and children's academic success. Green et al. (2012) reported that there is little known about the characteristics of parents who are involved in their children's education. This study adds understanding on how to increase parental involvement in order to increase children's academic success.

This study examined a meaningful gap in the current research literature, a lack of knowledge and understanding of the characteristics of parents who partake in their children's education and a lack of knowledge of the challenges or beliefs of parents who find it difficult to be involved in their children's education.

Purpose of the Study

The purpose of this cross-sectional, quantitative study was to examine the relationship between parental involvement, parenting styles, parents' internal attachment and children's academic success. The study used two mediation models. The first mediator variable model examined the mediating effect of parental involvement on the relationship between parental internal attachment (independent variable) and children's academic success (dependent variable). The second mediator variable model examined the mediating effect of parental involvement on the relationship between parenting styles (independent variable) and children's academic success (dependent variable).

The Study's Intent

By examining the mediating effect of parental involvement on the relationship between parental internal attachment and children's academic success (first model) and the mediating effect of parental involvement on the relationship between parenting styles and children's academic success (second model), the study has provided a better understanding of the relationship between parental involvement (mediator variable) and children's academic success (dependent variable).

The dependent variable (children's academic success) was operationalized as students maintaining a minimum grade of 75 in reading, language arts, and mathematics for the child's most current and completed school year and is a categorical binary variable (pass/fail). In order to run analysis for mediation, the dependent variable (children's academic success) was converted to a continuous variable (children's GPAs) ranging in scores from 75 to 95. Children's academic success was considered successful

when a child had achieved a grade of C or 75% in all three subjects of reading, language arts, and mathematics and children's academic success was considered unsuccessful if a child had not achieved a grade of C or 75% in all three subjects of reading, language arts, and mathematics. In the first model, parental internal attachment patterns is a categorical independent variable and was measured using the Relationship Scales Questionnaire (Bartholomew, Horowitz, Williamson, Walters, & Shaffer, 2002).

In the second model, parenting styles is a categorical independent variable and it was measured using the Parenting Style Scale (Saunders, Hume, Timperio, & Salmon, 2012). The purpose of the mediator variable, parental involvement, was to determine if the relationship between parental internal attachment patterns had a direct or indirect effect upon children's academic success or if parental involvement influences the relationship between parental internal attachment patterns and children's academic success. The first mediator model determined that parental involvement (mediator variable) does influence the relationship between parents' internal attachment patterns and children's academic success. The second mediator model determined that the mediator variable, parental involvement also had a direct effect on the relationship between parenting styles and children's academic success. The variables socioeconomic status and parents' level of education were controlled.

Research Questions and Hypotheses

There are six questions that drive this research. Each of the independent, dependent, and mediator variables in the study are mentioned in the research questions and hypotheses.

Research Question 1: What is the relationship between parent's internal attachment patterns (secure, preoccupied, fearful, and dismissive) as measured by the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994) and parental involvement as measured by the Parent and School Survey (PASS; Ringenberg, 2017, 2005)?

$H_0$1 = There is no relationship between parent's internal attachment (IV) measured using the relationship scales questionnaire and parental involvement (DV) is being measured using the parent and school survey.

$H_1$1 = There is a relationship between parent's internal attachment (IV) and parental involvement (DV).

Research Question 2: What is the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-uninvolved) as measured by the Parenting Style Scale (PSS; Saunders et al., 2012) and parental involvement as measured by the Parent and School Survey (PASS; Ringenberg, 2017, 2005)?

$H_0$2 = There is no relationship between parenting styles (IV), a categorical variable measured using the parenting style scale and parental involvement (DV) was measured using the parent and school survey.

$H_1$2 = There is a relationship between parenting styles (IV) and parental involvement (DV).

Research Question 3: What is the relationship between parent's internal attachment patterns (secure, preoccupied, fearful, and dismissive) as measured by the Relationship

Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994) and children's academic success as measured by numerical grades of 75 to 95 in Language Arts, Reading, and Mathematics for the most current completed school year to acquire the category of academic success?

$H_0$3 = There is no relationship between parent's internal attachment (IV) measured using the relationship scales questionnaire and children's academic success (DV) measured as a minimum grade of 75 in reading, language arts, and mathematics for the most current completed school year.

$H_1$3 = There is a relationship between parent's internal attachment (IV) and children's academic success (DV).

Research Question 4: What is the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-uninvolved) as measured by the Parenting Style Scale (PSS; Saunders et al., 2012) and children's academic success as measured by numerical grades of 75 to 95 in Language Arts, Reading, and Mathematics for the most current completed school year to acquire the category of academic success?

H_o4 = There is no relationship between parenting styles (IV) a categorical variable measured using the parenting style scale and children's academic success (DV)measured as a minimum grade of 75 in reading, language arts, and mathematics for the most current completed school year.

$H_1$4 = There is a relationship between parenting styles (IV) and children's academic success (DV).

Research Question 5: What are the mediating effects of parental involvement as measured by the Parent and School Survey (PASS; Ringenberg, 2017, 2005) on parents' internal attachment patterns (secure, preoccupied, fearful, and dismissive) as measured by the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994) and children's academic success as measured by numerical grades of 75 to 95 in Language Arts, Reading, and Mathematics for the most current completed school year to acquire the category of academic success?

$H_0$5 = Parental involvement (mediator) measured using the parent and school survey does not mediate the relationship between parents' internal attachment (IV) being measured using the relationship scales questionnaire and children's academic success (DV) being measured as a minimum grade of 75 in reading, language-arts, and mathematics for the most current completed school year.

$H_1$5 = Parental involvement (mediator) does mediate the relationship between parents' internal attachment (IV) and children's academic success (DV).

Research Question 6: What are the mediating effects of parental involvement as measured by the Parent and School Survey (PASS; Ringenberg, 2017, 2005) on parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-uninvolved) as measured by the Parenting Style Scale (PSS; Saunders et al., 2012) and children's academic success as measured by numerical grades of 75 to 95 in Language Arts, Reading, and Mathematics for the most current completed school year to acquire the category of academic success?

$H_0 6$= Parental involvement (mediator) being measured using the parent and school survey does not mediate the relationship between parenting styles, a categorical variable (IV) being measured using the parenting styles scale and children's academic success (DV) being measured as a minimum grade of 75 in reading, language arts, and mathematics for the most current completed school year.

$H_1 6$ = Parental involvement (mediator) does mediate the relationship between parenting styles (IV) and children's academic success (DV).

Questions 1-4 was tested for correlations between the independent variables and the dependent variables. Questions 5-6 was the focus of the study and tested for mediation. Question 5 was tested for determining the effect parental involvement has on the association between parents' internal attachment patterns and children's academic success. Question 6 was tested for determining the effect parental involvement has on the association between parenting styles and children's academic success.

Theoretical Framework for the Study

There has been a large body of research culminated during the past 40 years on the direct positive impact of parental involvement on children's academic success (Blair, 2014; Hill & Tyson, 2009). In addition, there has also been little known about the characteristics of the parents who partake in their children's education and little is known about the characteristics of the parents who face challenges in becoming involved in their children's education (Green, Walker, Hoover-Dempsey, & Sandler, 2012). This study examined two parental characteristics, parenting styles and parental internal attachment, and their effect on parental involvement and children's academic success.

Baumrind (1971) parenting typologies is one theory that was used in this study to examine the relationship between parenting styles/typologies and children's academic success as well as to examine the relationship between parenting styles and parental involvement. Baumrind's four parenting styles/typologies are determined by the degrees of each of the following constructs: parental warmth, parental control, parental expectations or demandingness, and communication. Baumrind's parenting typologies have been used in numerous research studies as a method to categorize differences in parenting practices. Baumrind's parenting typologies used as a theory in this study will be discussed in further detail in chapter two.

A second theory used in this study, which is also discussed in detail in chapter two, is attachment theory (Bowlby, 1940, 1950; Ainsworth, 1970; Main, 1980). In this study, attachment theory was used to examine the relationship between parents' internal attachment patterns and parental involvement as well as to examine the relationship between parents' internal attachment and children's academic success. As stated earlier in this chapter, attachment influences academic success (Bergin & Bergin, 2009: Frankel & Bates, 1990; Main, 1983; Moss & St-Laurent, 2001; Sroufe, 2005). Researchers have also shown that attachment patterns are transferred from one generation to the next generation. Attachment patterns are often repeated in the subsequent generations through the parent's internal working model (Verhage et al., 2016). This study examined parental internal attachment patterns and the effects of parental internal attachment on parental involvement and children's academic success. Attachment theory was used in this study to examine if academic success had a link to generational challenges to

academic success. Attachment theory will be discussed in further detail in chapter two. In the next section, the nature of the study begins to integrate the theories, variables, and the methodology used for the study.

Nature of the Study

This study is a cross-sectional, quantitative study that consists of two mediator models. The mediator variable in both models is parental involvement. This study examined the relationship between parental involvement, parent's internal attachment patterns, parenting styles and children's academic success. The first mediator model examined whether parental involvement is a mediator variable for the relationship between parents' internal attachment, the independent variable, and children's academic success, the dependent variable in this first model. The second mediator model examined whether parental involvement is a mediator variable for the relationship between parenting styles, the independent variable, and children's academic success, the dependent variable, in this second model.

Linear regression was used to analyze the relationships between the independent variables and the dependent variables in the first four research questions in the study. Linear regression was also used to test for mediation and to analyze the fifth and sixth research questions in the study.

Parents from two western cities, who have a child between seven and eleven years of age completed an online survey (Survey Monkey). Data was collected using the relationship scales questionnaire (parent's internal attachment), parenting styles scale (parenting styles), parent and school survey (parental involvement) and grades from the

child's report card (children's academic success). The operational definitions for these variables are explained next.

Definitions

The following is a list of vital terms and their definitions.

Parent's internal attachment patterns: The attachment that the parents formed as children with their parents (Ainsworth & Bowlby, 1991; Bartholomew & Horowitz, 2002, Bretherton, 1992; Hazen & Shaver, 1987; Main, 1985; Pederson, et al.., 2014, van Rosmalen et al., 2016).(Ainsworth & Bowlby, 1991; Bartholomew & Horowitz, 2002, Bretherton, 1992; Hazen & Shaver, 1987; Main, 1985; Pederson, et al., 2014, van Rosmalen et al., 2016).

Parent-Child attachment: The emotional bond formed between a child and his or her parent (Bowlby, 1982).

Internal working model: A term coined by John Bowlby (Father of Attachment) that refers to an individual's internal blueprint for security and confidence, which is consistent through the lifespan (Bowlby, 1982; Ainsworth & Bowlby, 1991).

Parenting styles: Four parenting typologies defined by Baumrind (1971) as authoritarian, permissive-indulgent, permissive-uninvolved, and authoritative based upon the constructs of parental warmth, parental control, parental expectations or demandingness, and communication.

Parenting practices: The culmination of parenting styles, parental attitudes, beliefs, rituals, and other habits parents have formed when interacting with their children (Newman et al., 2015; Stright & Yeo, 2014).

Family backgrounds: The family's particular history, including culture, education, beliefs, rituals, and socioeconomic status (von Otter, 2014).

Parental warmth: When the parent expresses affection, approval, and interest toward the child (Baumrind, 1971).

Parental sensitivity: The parent's ability to accurately interpret his/her child's behaviors and communication and determine the child's needs and wants (TamisLeMonda & Baumwell, 2011).

Parental control: The manners and methods used by the parent to enforce rules with their child (Baumrind, 1971).

Parental demandingness: The particular expectations that the parent places upon their child and the methods used by the parent for the child to meet those expectations (Baumrind, 1971).

Assumptions

One important aspect of the study that is believed but cannot be demonstrated, due to other possible contributing factors, such as time constraints or language barriers, to be true is that there are many parents who are not interested in partaking in their children's education. Researchers on this topic have shown that parental involvement is instrumental for children's academic success (Billman, Geddes, & Hedges, 2005; Blair, 2014; Epstein, 2001; Henderson & Mapp, 2002; Hill & Craft, 2003; Hill & Tyson, 2009; Huang & Mason, 2008; Jeynes, 2005; Overstreet, Devine, Bevins & Efreom, 2005; Sawyer, 2015). The literature on this topic has also shown that there is little understanding behind the motivation for parents partaking or not partaking in their

children's education (Green et al., 2012). One purpose for this study was to gain an understanding of the characteristics of the parents who partake in their children's education.

A second important assumption in this study is that the parents answered the questionnaires honestly as well as recorded their child's grades as they actually appeared on their child's report card. An important reason for this study to utilize mediation models was to examine the relationship between parental involvement and parenting styles.

Scope and Delimitations

It is still unclear how to increase children's academic success. Various factors have been associated with poor school performance with children, such as failing schools, poor neighborhoods, children's behavioral problems, ineffective parenting practices, the child's family background, the parent's attitudes about education, a lack of parental involvement in their children's education, poor quality parent-child relationships, and negative perceptions from parents and teachers. In spite of a robust body of literature, culminated over the past four decades, on children's academic success, many children are not succeeding. An expansive body of literature shows the evidence for the impact of parental involvement upon children's academic success (Billman et al., 2005; Blair, 2014; Epstein, 2001; Henderson & Mapp, 2002; Hill & Craft, 2003; Hill & Tyson, 2009; Huang & Mason, 2008; Jeynes, 2005; Overstreet et al., 2005; Sawyer, 2015).

It is imperative to understand the factors that influence parents to become involved in their children's education. There is little known about the characteristics of

the parents who are more involved in their children's education. There is a gap in the literature which examines the characteristics of parents who participate in their children's education.

The specific focus of examining the effect of parental involvement on the relationships between parental internal attachment patterns, parenting styles, and children's academic success was chosen in order to address the gap in the literature. There needs to be further understanding of the characteristics of parents who partake in their children's education. The relationship between parents' internal attachment patterns and children's academic success has the potential to tell us if children's academic challenges are possibly a generational issue.

Through examining the relationships between parental internal attachment patterns, parenting styles, parental involvement, and children's academic success, there is potential to gain a better understanding of the effect that parental involvement has or does not have on parental internal attachment patterns or parental involvement has or does not have on parenting styles.

The populations included in this study are biological or adoptive parents who speak and write English, who have a child seven to eleven years of age who are enrolled in elementary school, attends regular-education classes, and the child lives with the parent more than 50% of the time during the child's school year.

The populations that are excluded in the study consist of children who was not enrolled in elementary school or a foster parent and not the child's legal guardian, and a child who does not live with the parent who wanted to participate in the study.

Theories that focus on attributional effects upon children's performance and behavior were not chosen for this study. Theories that address the effects of poverty, failing schools, family backgrounds, or effects of teachers on students' performance were also not chosen. The boundaries and scope of the study focuses on two theories: attachment and Baumrind's parenting typologies due to the research questions, which focus on parental internal attachment patterns, parenting styles, parental involvement and their effects on children's academic success.

Potential Generalizability

In a quantitative study, one of the most crucial components affecting potential generalizability or external validity is the sample and sampling procedure chosen for the study. In this study, convenient sampling were used in obtaining participants in order to increase its potential for generalizability and external validity. Since convenient sampling is a method where participants were chosen according to availability, individuals who might be better suited for a particular study might not be included in the study due to a lack of convenience. In addition to convenient sampling, snowball sampling was also used to recruit participants for the study. Therefore, the sample does not represent generalizability and can have low external validity.

Limitations

One of the limitations of the study related to the study's design involved the methodology for data collection. Utilizing an online method for data collection poses several challenges. One such challenge was not knowing who actually completed the surveys; if the participant misunderstood several questions or misunderstood the

directions and therefore did not answer the questions accurately, or if the participant had challenges with the technology and therefore withdrew from the study or did not complete all of the information requested. Another limitation of the study is determining if the convenient sampling procedure for this study, where two western cities were used for participant-recruitment, represents the general population for the rest of the United States. Convenient sampling for this study might have attracted more involved parents than uninvolved parents. There is also need for consideration for construct validity for the survey-instruments chosen for this study. Confounding variables, such as the child's intellectual and academic ability, in spite of the child's background, including parenting and parental involvement has potential to influence the study's data. The children's grades reported by the parents is a limitation. Lastly, there is potential for deriving wrong conclusions based upon the data as well as deriving inaccurate inferences from the study. One of the major advantages of an online study is its ability for anonymity, which helps to eliminate bias that the researcher may have toward particular participants and their responses. Another bias can be the interpretation and analysis of the data, which were addressed by having each of the committee members review the data and the analysis before agreeing upon conclusions about the study's outcome.

A substantial method for addressing limitations pertaining to data collection is to assure the participants of their anonymity, confidentiality, as well as their rights to withdraw from the study at any time. These challenges and limitations were t addressed given the parameters and robust nature of the research design and planned analyses.

Significance

Numerous research studies have shared a common goal of demonstrating the importance of parental involvement in order for children to succeed in school. However, it is largely unknown which parental characteristics, such as parental internal attachment patterns and parenting styles are associated with parental involvement. By addressing this gap in the literature, this study has increased an understanding of the factors driving parental involvement in their child's education and ultimately their child's academic success. Through studying the parents' internal attachment patterns along with parenting styles, researchers and educators can begin to understand some of the characteristics of parents who are motivated to be involved in their children's education. The findings from this study have the potential of being able to recognize parental characteristics of children who may be at risk of not succeeding in school.

The findings from this study have the potential to provide information that can be used by educators and psychologists to design programs that will heighten parental involvement and increase children's academic success. One method would be to provide parental-education classes at the school –providing them with necessary skills, including understanding what their child is learning and how it's being taught, to improve their child's educational success. A second method would be to train teachers to utilize these parental skills in their classrooms, which would increase children's academic success. Another potential contribution of the study is that psychologists can create a screening instrument that tests children and detects children who are at risk of not succeeding in school at an early age in their academic development.

Additionally, the findings from the study have the potential for identifying children who are at risk of not succeeding in school, creating programs or methods to help children who are at risk of not succeeding in school, helping parents have a better understanding of their children's needs in order for their children to succeed in school, and for helping parents and teachers to collaborate in working toward children's academic success.

Summary

Numerous studies during four decades have shown that parental involvement has a direct positive impact upon children's academic success. Chapter 1 includes a brief history of the research on this topic leading up to the focus for this study. The focus for this study was to examine the relationship between parental involvement, parenting styles, parent's internal attachment patterns, and children's academic success. In addition, chapter one provided a brief overview of using two mediator models in the study with parental involvement as the mediator variable, parenting styles and parent's internal attachment patterns as the independent variables and children's academic success as the dependent variable. Chapter 2 provides a more detailed overview of the literature on parental involvement, parenting styles, parent's internal attachment patterns, and children's academic success. Chapter 3 provides a detailed methodology section that discusses the research design, the sample, instrumentation, data collection, and data analysis. Chapter Four provides the data analyses of the study and the findings. Chapter Five discusses the imperatives of the findings as well as the implications for positive

social change. In chapter two, the reader will gain an understanding from the literature what is known about this topic and what still needs to be addressed.

Chapter 2: Literature Review

Introduction

According to the U.S. Department of Health and Human Services (2013), during the school year 2011-2012, 4,478,000 children were not academically successful across the United States and had to repeat a grade. Children who do not succeed in elementary school are at high risk of a poor quality of life, including behavioral problems, being at risk of dropping out of high school, and living at a lower socioeconomic status (Center for Public Education, 2007; Worley, 2007). Academic achievement affects long-term productive health, social, and professional outcomes (Duncan et al., 2007; Lee, 2010; U.S. Bureau of Labor Statistics, 2010). Patterns for academic success develop early in a child's life. Patterns for academic success or academic failure can also create patterns for behavioral problems. Children who are not academically successful in elementary school are at greater risk of poor academic performance in high school and are at risk of dropping out of school (Zentall & Belke, 2012). The root of academic deficiencies in children aged 5-12 in the United States has many variables and warrants further investigation into understanding how to increase children's academic success.

In order to increase children's academic success, researchers and educators need to continue conducting research that brings understanding of the factors that play an imperative role in children's academic performance. Various factors have been associated with poor school performance with children, such as failing schools, poor neighborhoods, children's behavioral problems, ineffective parenting practices, the child's family background, the parent's attitudes about education, a lack of parental involvement in their

children's education, poor quality parent-child relationships, and negative perceptions from parents and teachers. It is still unclear how to increase children's academic success.

In spite of a robust body of literature, culminated over the past four decades on children's academic success, many children are still not succeeding. The aim of this chapter is to address the impact that parents have on their children's education. Since parents play several roles in the child's life, including protector, provider, nurturer, it is important to examine the roles parents may play in their child's education. In addition to the introduction, the literature review for this study includes parents and their children's education, parental involvement and children's academic performance, effect of parenting styles on children's academic achievement, understanding the role of attachment on children's academic achievement, and the gap in the literature.

Parents and their children's education will address several parental variables examined in studying the relationship between parents and their children's education. Parental involvement and children's academic performance narrows the focus in the chapter to discussing the role that parental involvement plays in children's academic success. Effect of parenting styles on children's academic achievement also has a specific objective of discussing the role that parenting styles plays in children's academic success. Understanding the role of attachment on children's academic achievement introduces the role of attachment on children's educational outcomes. Lastly, the gap in the literature of how parenting styles and parent's internal attachment mediate parental involvement in association with children's academic success is discussed in the last section of this chapter.

Literature Review Strategy

The Walden library's multiple databases that were used included: Eric, Primary Search, PsycArticles, PsycInfo, PsycExtra, and SocIndex. My search strategies were limited to peer-reviewed articles expanding between 2006 and 2016 for all sections. I eliminated articles whose focus was too narrow, such as focusing on a disorder or a specific population, such as special education students, or a particular ethnic or cultural group. The search terms that I used consisted of:

- "Academic Success and Statistics" yielded 169 articles
- "Children's Educational Outcomes and Statistics" yielded 32 articles
- "Children's Academic Achievement and Parents and Elementary School" yielded 76 articles "Children's Academic Success and Parents and Elementary School" yielded 39 articles
- "Children's Academic Success and Parental Involvement" yielded 218 articles
- "Children's Academic Achievement and Parental Involvement" yielded 498 articles
- "Children's Academic Performance and Parental Involvement" yielded 268 articles
- "Children's Educational Outcomes and Parental Involvement" yielded 211 articles
- "Parenting and Children's Educational Outcomes" yielded 441 articles
- "Parenting Practices and Children's Education" yielded 1,807 articles

- "Parenting Styles and Children's Educational Outcomes" only yielded 5 articles "Parenting Styles and Children's Academic Achievement" yielded 30 articles "Parenting Practices and Children's Academic Performance" yielded four articles
- "Parent-Child Relationship and Children's Academic Achievement" yielded 47 articles
- "Attachment and Children's Academic Achievement" yielded five articles
- "Attachment and Children's Educational Outcomes" yielded three articles
- "Attachment and Children's Academic Success" only yielded two articles
- "Attachment and Children's Behavior in School" yielded 50 articles
- "Parent-Child Attachment and Education" yielded 40 articles
- "Parent-Child Attachment and Children's Education" yielded only five articles
- "Parent-Child Attachment and Fathers" yielded 96 articles
- "Attachment and Children's Education" yielded 127 articles
- "Attachment and Single Parents" yielded 58 articles
- "Parenting Styles and Culture" yielded 375 articles
- "Attachment and Culture" yielded 1,160 articles
- "Parent-Child Attachment and Culture" yielded nine articles
- "Parent's Attachment and Culture" yielded 17 articles
- "Parental Involvement and Barriers' yielded 225 articles

- "Parenting Styles and Transmission of Generations" yielded 12 articles
- "Environment and Academic Success" yielded 660 articles "Culture and Children's Academic Success" yielded 13 articles
- "Attachment and Transmission of Generations" yielded 20 articles
- Child's Attachment and Culture" yielded 84 articles
- Parents' Attitudes and Teachers' Attitudes and Children's Academic Success yielded 13 articles

Theoretical Framework

Attachment theory has been used in a variety of contexts due to its primary premise that a secure internal working model (secure-attachment is the foundation for all other relationships, for confidence in exploring one's emotional and learning environments, and academic performance). Bowlby, considered the father of attachment theory, coined the term internal (Ainsworth & Bowlby, 1991; Bretherton 1992; Pederson et al.., 2014, van Rosmalen et al., 2016), which refers to an internal mental blueprint for which an individual (infant through adulthood) has confidence or anxiety toward his or her social and academic environments.

Attachment influences school success (Bergin & Bergin, 2009: Frankel & Bates, 1990; Main, 1985; Moss & St-Laurent, 2001; Sroufe, 2005). Bergin and Bergin (2009) found that securely-attached children have better reading and math skills than children who are insecurely-attached. In this 2009 study, they discussed a study by Kerns et al.

(2000) that found that the child's attachment to mother and father predicted academic skills in children who were third, fifth, and sixth graders. Bergin and Bergin also discussed a study by Aviezer (2002) where the child's attachment to his or her mother predicted the child's GPA and the child's scholastic attitude among Israeli sixth graders. Sroufe's (2005) 30 year longitudinal study demonstrated that attachment was linked to school success through the child's ability to accept and meet academic challenges with confidence. Attachment influences several factors, such as confidence and higher emotional regulation, which are vital for children's academic success. As mentioned in Chapter 1, it has been shown that attachment patterns are transferred from one generation to the next generation, and are often repeated in the subsequent generations through the parent's internal working model (Verhage et al.. 2016). Parental internal attachment patterns and the effects of parental internal attachment on parental involvement potentially has an impact on children's academic success.

The second theory used in this study, and is explained in further detail, is Baumrind's (1971) parenting typologies. Baumrind derived that there are four basic types of parenting (authoritarian, permissive-indulgent, permissive-uninvolved, and authoritative) based upon the following constructs used in parenting: warmth, sensitivity, demandingness, and control. Authoritarian parents expect their children to obey the rules without any feedback from the children and to always show respect and are low in parental warmth and sensitivity. Parents with a permissive-indulgent parenting style show lots of parental warmth, have no boundaries for their children, and have a tendency to be 'friends' with their children. Parents who have a permissive-uninvolved parenting

style show little interest in their children and more prone than other parents to be neglectful towards their children. Authoritative parents set limits with their children for the benefit of the child and express the highest degree of parental warmth and sensitivity towards their children. Parental warmth, a major construct of Baumrind's parenting styles, especially maternal warmth, seems to foster both children's academic success and children's self-esteem (Newman et al.., 2015; Stright & Yeo, 2014).

Attachment theory relates to the study approach and the research questions because the study examines how parental internal attachment patterns affect parental involvement and children's academic success. Baumrind's parenting typologies relates to the study approach and the research questions because the study also examines how parenting styles influences parental involvement and affects children's academic success. The next sections of this chapter discuss the key variables in the literature on parental involvement and children's academic success.

Parents and Their Children's Education

This section addresses literature on the broad topic of the relationship between parents and their children's education. It will discuss the research addressing the different variables researchers have examined in studying the relationship between parents and their children's education. Some of the variables studied that impact children's academic success include: failing schools, poor neighborhoods, the child's family background, the parent's attitudes about education, children's perceptions of their parents' expectations, children's beliefs about their education, children's behavior, and the parent-child relationship.

Failing schools are often located in poor neighborhoods and provide little opportunity for children. First, parents can influence their child's education outcome indirectly by where they live. For example, children do not receive a quality education when enrolled in a failing school academic achievement and/or to gain adequate job skills (Bellei, 2013; Glazzard, 2014; Jackson & Hilliard, 2013; Johnson, 2014; Kawai, Serriere, & Mitra, 2014; Russo, 2005; Schwebel, 2012). Thomas (2010) found that the lives and education for children of color are often diminished due to assumptions and low expectations by both teachers and parents. Many of the parents living and raising children in poor neighborhoods have little education and lack job skills. Due to a lack of education and a lack of academic skills, parents do not feel qualified to engage in their children's education (Sime & Sheridan, 2014; Thomas, 2010).

Parents are often aware of the resources or lack of resources available for their children. This applies to impoverished parents who are aware of their academic incompetence (Sime & Sheridan, 2014). Sime and Sheridan (2014) found that the impoverished parent's desire to help their children achieve a higher level of education and economic status was hampered by the absence of strong social networks. One conclusion drawn from the studies mentioned in these two paragraphs is that impoverished families are often isolated and withdrawn from resources available to families not living in poverty.

Families living in poverty have their own unique perspective on education. Parents living in poverty showed limited confidence that their engagement in schoolbased activities would enable them or their children to overcome their barriers of being isolated

from others who are successful both academically and financially (Sime & Sheridan, 2014). Sime and Sheridan (2014) also found that mothers did not invest time or energy in seeking assistance outside of their impoverished community. Parents living in poor neighborhoods view their children's teachers to be responsible for their children's education (Sime & Sheridan, 2014; Thijs & Eilbracht, 2012; Wang, Hill, & Hofkens, 2014).

There is a similar pattern between impoverished parents viewing their children's teachers to be responsible for their children's education and the viewpoint that children who grow up in poverty have toward their teachers. Children also exhibit their parents' attitudes toward teachers and education in the classroom (Shirvani, 2007). Calarco (2011) found an important relationship between children's social-class background and the manner in which they seek help in the classroom. Children who grow up in poverty tend to wait for the teacher to assist them while middle-class students initiate seeking assistance from their teachers. Therefore, the middle-class students received more assistance as well as positive attention from their teachers while children who grow up in poverty seem to receive more negative attention from their teachers and did not perform as well as the children who came from middle-class families.

Children who have lower academic performance and live in poverty are more likely to be attracted to criminal activity, including acts of aggression (Heather & Mahoney, 2007). There appears to be a vicious cycle among poor behavior, safety, and academic performance. Low academic performance is related to poor behavior in children (Kim & Page, 2013) as well as to acts of aggression and violence (Heather &

Mahoney, 2007) and to low-income and disadvantaged lives (Comber, 2014; Worley, 2007). Milam, Furr-Holden, and Leaf (2010) found that children's academic performance is also lower in poverty-stricken and unsafe neighborhoods. Children who do not feel safe in their neighborhoods or at school are more likely to do poorly in school and continue the cycle of poverty. These studies show that low academic performance appears to be the foundation for poverty and behavioral problems (Comber, 2014; Heather & Mahoney, 2007; Kim & Page, 2013; Milam, et al., 2010; Worley, 2007). There appears to be a vicious cycle among low academic performance, poor neighborhoods, and behavioral problems.

Family background influences children's school performance and abilities through early socialization, interaction patterns, and material circumstances (von Otter, 2013). The parental messages that children receive about interacting with others sets the stage for children to either perform academically well or to perform academically poor. When encouragement and positive messages are a major part of a child's family background, the child is more likely to succeed academically (von Otter, 2013). The early school years sets the stage for the child's future success in their academics as well as in their socialization and other behaviors (Comber, 2014; McLachlan et al., 2013). In addition, a child's family background is another influencing factor that leads to a child's decision to continue his or her education as a young adult. Another component of the child's family background is the parent's expectations for their child.

Children are often attuned to their parents' and teachers' beliefs about educational competence and behave according to these beliefs. Parents' expectations and attitudes

toward education and their children's capabilities play an imperative role in their children's academic performance (Enlund, Aunola, & Nurmi, 2015). According to Gut, Reimann, and Grob (2013), parents' and teachers' perceptions of children's academic competence play an important role in being able to predict children's actual academic performance. These authors also found that when children receiving negative messages from their parents or teacher, that the child performed poorly in school. Children who receive positive messages from their parents perform well in school.

A parent's encouragement toward their child can vary according to the parent's belief about their child's abilities and academic performance. Parents typically attribute their children's success to ability (among highly educated parents) or to child' effort (among low educated parents) while the child's failure in school is typically attributed to a lack of effort on the child's part (Rytkonen, Aunola, & Nurmi, 2005). Children's perceptions of their parents' demandingness and responsiveness to them, significantly predicted their academic achievement and motivation to learn something new (Marchant, Paulson, & Rothlisberg, 2001). Children's perceptions of their parents' attitudes about education creates the foundation for children's belief about their own education, which had a long-lasting effect (Morrison, 2009). Through a nine- year study, Enlund et al. (2015) found that parents' attributional styles (parents' attitudes) stayed the same from when the child was in first grade to the time that the child was in high school. It is also vital to understand that a parent's attitude about their child's academic performance and capabilities can be influenced by their culture even more than by the child's actual academic performance (Yamamoto & Holloway, 2010).

Parental attributional styles related to education may differ by culture. According to Yamamoto (2010) parental expectations are higher among Asian American families than other ethnic groups. Yamamoto (2010) also found that parental expectations are mixed amongst Latino and African American families for their children's education. Parental expectations amongst the Latino and African American populations may differ according to socio-economic status, available resources, and the neighborhoods. Irizary (2009) found that students of color (African-American and Latino) are much more likely to be enrolled in special education and much more likely to drop out of high school. In addition, there is a correlation between families living in poverty, a lack of parental involvement in their children's education, and poor academic performance amongst the children living in these communities (Irizary, 2009). Steinberg and Almeida, (2010) found that for low income African American and Latino families, that only 50 percent of these children graduate from high school. Many educators conclude that AfricanAmerican and Latino parents do not value education. However, this way of thinking tends to place blame strictly on the children and families and does not tend to be very effective in addressing the problem (Irizary, 2009). Schwebel (2012) expressed that there is a connection between what parents believe their children are capable of achieving and the messages parents receive about the schools their children attend and the neighborhoods in which they live. The culmination of these studies shows an agreement that children's perceptions of their parents' attitudes and expectations about child's capabilities and education outcomes play an important role in predicting children's academic achievement.

Another common element amongst the research, stated above, on children's academic success is that children's academic performance is not dependent upon just one element or one construct, such as just the child's teacher or just the child's parents. Rather, children's academic performance involves the combination of several different constructs, including parents, teachers, and the relationship between parents and teachers. The next subsection discusses how the relationship between teachers and parents play an important role in the outcome for children's academic success.

Parents, Teachers, and Children's Educational Outcomes A child's educational achievement is built on a trifold foundation of children, parents, and teachers. According to Cook, Shepherd, Cook, and Cook (2012), it is critical for teachers to be receptive to listening to parents and learning their interpretation of the children's personal challenges and obstacles that may impair their ability to learn in the classroom. Shirvani (2007) found that when teachers engage parents in their children's education that parents have a positive attitude toward their children's schools and teachers.

The relationship that the teacher forms or does not form with the child's parents can affect the child's academic achievement. Crozier and Davies (2007) found that sometimes it is the teachers or the schools that prevent a positive relationship to develop between parents and teachers. Kraft and Rogers (2014) found that positive teacher-parent communication often leads to higher parental involvement and higher academic achievement. Parents who feel they have a positive relationship with their children's teachers are more likely to be involved in their children's education as well as have a positive attitude toward their children's education. Thijs and Eilbracht (2012) found a

relationship between teacher-student conflicts and the lack of a positive relationship the teacher has with that student's parent. In addition, Thijs and Eilbracht (2012) found that there was higher degree of conflict between the teacher and parent for children who were thought to have ADHD by the teacher. It is imperative for teachers and parents to value each other's role and to work together in order for the child to succeed academically.

It is also imperative for teachers to understand the challenges some parents face in becoming involved in their children's education. Many parents face barriers and hardships in order to obtain parental involvement (Hornby & LaFaele, 2011; Kim, 2009; Williams, 2013; LaRocque, Kleiman, & Darling, 2011). Kim (2009) identified eight types of barriers that schools can create for parents to be involved in their children's education. They include (a) teachers' perception about the efficacy of minority parents, (b) teachers' perception concerning the capacity of (minority) parents, (c) teachers' beliefs in the effectiveness of parental involvement and developmental philosophy, (d) teachers' self-efficacy in teaching effectiveness, (e) school friendliness and positive communication, (f) diversity of parental involvement programs, (g) school policies, and (h) school leadership. It is vital for parents and teachers to be able to communicate their expectations as well as their concerns in working together for the benefit of the child.

Positive and clear communication between teachers and parents is vital in order to increase parental involvement in children's education. Sawyer (2015) also explains that parental involvement begins with meaningful relationships where parents trust their children's teachers. It can be very effective for a child to experience having their parents work together with their teachers for the child's best interest. However, it is beneficial

for parents and teachers to be clear in their own definitions of parental involvement. LaRocque et al. (2011) found that a lack of communication between parents and teachers significantly decreased parental involvement. Many factors can influence parental involvement including cultural beliefs about education, parents' accessibility and lack of accessibility to meet with their children's teachers. Parents who do not have accessibility to attend their children's school activities will influence parental involvement. Additional factors that influence parental involvement include parental expectations of their children's teachers, principals, as well as parental expectation of their children's performance, parental attitudes toward their children's education, parental attitudes toward their children's teachers, and possible parent-teacher miscommunications about parental involvement. LaRocque et al. (2011) also found that a challenging factor for teachers is working with a diverse group of parents. Teachers are already busy and they do not feel adequately trained to communicate effectively with parents from different cultural backgrounds about being involved in their children's education (LaRocque et al., 2011). A major component of communication between parents and teachers involve understanding each other's perspectives on the topic of education and each individual's role in the process of children's academic success.

The parent-teacher relationship is most effective when this relationship is 'seen' as a partnership for the ultimate goal of children's academic success. Kraft and Rogers (2014) found that effective communication between teachers and parents helped significantly in increasing children's academic performance. When teachers had a better understanding of the child's family background, they showed a more positive attitude

toward that child (Kraft & Rogers, 2014). It is also important for teachers to understand the parents of their students. Some parents have histories of negative experiences with schools and teachers, both as parents and as students (Walters-Parker, 2011). Parents who have histories of negative educational experiences will often continue to have negative views toward education and teachers. Dor and Rucker-Naidu (2012) found that teachers would be reluctant to build relationships with parents who have negative attitudes toward teachers and education. Walters-Parker (2011) emphasizes the significance for teachers to build partnerships with their students' parents for the sake of academic achievement.

When parents have a positive attitude toward their children's education, children perform well academically (Khodavarifard, Brinthaupt, & Anshel, 2010; Perera, 2014). Children tend to act toward their teachers in a similar manner that their parents act toward their children's teachers (Thijs & Eilbracht, 2012). This behavior transfers to academic disciplines as well. Children will then perform academically according to their interpretations of their teachers. For example, when a teacher expresses a negative attitude towards the child's ability, the child will perform poorly and when a teacher expresses a positive attitude towards the child's ability, the child will perform well. Jones, Bob, and Raver (2013) found that warm, emotionally positive relationships with teachers have been linked to children's later academic success, while children who engage in high conflict with teachers have been shown to have more negative attitudes about teachers and school. Teachers' attitudes toward a particular child can have a

lasting impact upon that child's academic performance. The next section further discusses the parent-teacher partnership through parental involvement.

Parental Involvement and Children's Academic Performance

Out of all the factors that have been studied and associated with children's academic success, parental involvement appears to be the most instrumental (Billman, Geddes, & Hedges, 2005; Blair, 2014; Epstein, 2001; Henderson & Mapp, 2002; Hill & Craft, 2003; Hill & Tyson, 2009; Huang & Mason, 2008; Jeynes, 2005; Overstreet, Devine, Bevins & Efreom, 2005; Sawyer, 2015). Numerous research studies over the past forty years have shown a positive relationship between parental involvement and children's academic performance, children's behavior, accountability, social skills, and attendance. Walker, Shenker, and Hoover-Dempsey (2010) found that parental involvement is a vital resource to children's academic performance, because it contributes to the development of cognitive and motivational attributes within the child, which are more important than just academic achievement tests. Grolnick (2015) also found that parental involvement affects children's competence in school.

A child's perception about their parent's involvement will have an imperative impact upon the child's self-esteem and academic performance (Cripps & Zyromski, 2009). Children who are not supported by their parents are more prone to do poorly in school. Parental involvement in combination with student motivation and teacherreported self-concept strongly predicts student achievement (Quilliams & Beran, 2009). When parents are involved in their children's education and expressing encouragement and positive interest in their children's educational outcomes, children

become motivated to perform well. Parents who are not involved and do not provide encouragement to their children are more likely to have children who perform poorly in school (Quilliams & Beran, 2009). There seems to be a simple and direct relationship between parental involvement and children's educational outcomes.

In spite of a simple and direct relationship between parental involvement and children's educational outcomes, parental involvement can mean very different things to parents and teachers. Young, Austin, and Grove (2013) explain that parents and educators often have miscommunications about the definition of parental involvement. It is imperative to define and determine the various types of parental involvement in order to determine which methods are most effective. Xu, Kushner Benson, Mudrey-Camino, and Steiner (2010) found six dimensions of parental involvement: 1) School Involvement, 2) TV Rules, 3) Homework Help, 4) Homework Frequency, 5) Parental Education Expectations, and 6) Extracurricular Activities. Xu, et al. (2010) found that parental education expectations had the strongest impact on children's academic success.

McNeal (2014) also found that different types of parental involvement, such as parent-child, parent-school, and parent-teacher involvement affect students' academic performance and behavior differently. Children often organize their thinking into distinct categories. Certain types of parental involvement are more effective with children. Kaplan-Toren (2013) found that there are positive links between home-based parental involvement and children's academic performance and negative links between schoolbased parental involvement and academic performance. Parents' home involvement in their children's education and parents' involvement in their children's

school-based activities provided different results with their children's academic performance (Green, Walker, Hoover-Dempsey, & Sandler, 2012).

One major component of parents' home involvement in their children's education is to read together. Parents who read together with their children and help their children with their homework increased their children's self-esteem, self-competency, and their academic achievement (Seden, 2008). Banerjee, Harrell, and Johnson (2011) discovered that higher reading comprehension scores occurred when children have experiences relating to greater cultural exposure and their parent's involvement in their education. Dopkins, Stright, and Kim (2014) also found that school-focused parenting practices predicted children's academic achievement. Weldon (2011) found that several metaanalyses were in agreement that parental expectations, extensive parent-child communication, reading with children, and parenting have the most influence upon children's educational outcomes. Children seem to acquire their motivation towards particular activities, such as reading and doing homework from their activities with their parents. For example, when children witness their parents using their imaginations to create activities, the children are more likely to be imaginative in their own activities (Seden, 2008). Children tend to copy their parents' attitudes and beliefs.

Children appear to be attuned to their parents' attitudes and what is important and valuable to their parents. Children are influenced by the conversations that they have with their parents as well as by how they are treated by their parents. One of the most influential forms of parental involvement is parent-child discussions on the topic of educational goals and ways to achieve those goals (Hill & Tyson, 2009). Children's self-esteem and academic performance are related to the child's interpretations of their

parents' actions, words, and involvement in their lives (Cripps & Zyromski, 2009). The common thread throughout the literature (Hill & Tyson, 2009; Marchant, et al., 2001; Cripps & Zyromski, 2009; Weldon, 2011) is that positive communication between parents and children is highly effective for children's academic success.

Parental involvement may differ by gender, race and socioeconomic class. Each of which will be discussed below. First, it has been known that mothers and fathers relate to their children in very distinguishably different manners (Kim & Hill, 2015). The role of fathers in the family has rapidly evolved and changed in drastic manners from fathers being strictly the breadwinner and disciplinarian in the family to working as a co-parent, where expectations of fathers have increased. Yet, there is very little research that examines the differences between mothers' and fathers' involvement in their children's education. According to Banerjee et al. (2011), cultural messages by mothers to their fourth-grade children predicted these same children's scores on their fifth-grade assessments. Kim and Hill (2015) found that fathers' involvement and mothers' involvement were equally strong for their children's academic performance. Still, there is an assumption that mothers are more intimately involved with their children than fathers. In addition to differences between how mothers and fathers view parental involvement and education, it is also equally important to understand how different cultures view parental involvement and children's academic performance.

Second, parental involvement may differ by racial group. Jeynes (2005) found that the positive correlation between parental involvement and children's academic performance is stable across racial groups. However, other research indicates that

African American parents are often uninvolved in urban schools (Abrams & Gibbs, 2002; Smith, Krohn, Chu, & Best, 2005). Abrams and Gibbs (2002) found that African American parents are more alienated from public schools than White American parents. Several factors are related to a lack of parental involvement, such as parents not feeling invited to be involved in their children's education, parents' feelings of cultural bias, and miscommunicated expectations between parents and teachers about involvement in their children's education, (Abrams & Gibbs, 2002). Parents will view education and involvement in education differently according to their beliefs and backgrounds. Third, the ways in which parents are involved in their children's education appears to also vary according to parents' level of education (von Otter, 2014). Parents who have a higher level of education and view education as important might have a stronger tendency to be involved in their children's education and encourage their children to attain a higher level of education for themselves (von Otter, 2014; Steinmayer, 2010; Wang, 2014). Children who have parents with lower levels of education do not receive the same degree of encouragement as children who have parents that are college educated. Steimayer (2010) suggested that more children can succeed academically if schools were to provide the encouragement that is missing in particular children's lives.

Many factors can act as barriers to a parental involvement in their child's education. According to Hornby and LaFaele (2011), parents' beliefs about education as well as their role in their children's education can act as a barrier to parental involvement. Parents will have their own perceptions of parental involvement according to their own beliefs and attitudes about education and their children's abilities.

Yamamoto (2010) found that parents often form their beliefs and expectations about schools and their children's teachers from their childhood experiences in school. Hornby and LaFaele (2011) found a variety of beliefs among parents that create barriers to parental involvement. Some parents may not view education as important. Other parents may have the opinion that schools alone are responsible for their children's education and therefore parental involvement will be low amongst this group of parents. Another group of parents may see themselves as inadequate to helping their children with school. Other parents will view intelligence as fixed and that their children's academic performance is based strictly on their talent.

Another barrier is when parents do not believe that their involvement is not valued by their children's teachers. Another group of parents may have poor physical or mental health and therefore find it difficult to be involved in their children's education. Some parents may view involvement in their children's education as something that is unobtainable for them. Williams (2013) found that parents and school personnel identified barriers that fit into four categories: 1) time poverty, 2) lack of success, 3) lack of financial resources, and 4) lack of awareness. Parents who have lower level jobs often have less opportunity to leave work and attend school functions or meetings with teachers.

Parents who have lower levels of education may also experience less success with helping their children in their homework. Parents who live in poverty will have less ability to pay for their children's school activities. In addition, parents may not receive the necessary messages from their children's teachers and teachers can assume that the

parents are simply not interested in being involved in their children's education. Therefore, educational achievements appear to be transferred from one generation to the next. It is through family interactions where children learn either to value education or view education as not important (Ferguson, Hagaman, Maurer, Mathews, & Peng, 2013). In addition to values, children also learn how to interact with others as well as how to behave in other areas of their lives through their family interactions. Ferguson et al. (2013) have found that behaviors and values acquired during childhood are often practiced later on in adulthood.

Another major component to children's school performance is the parent-child relationship. Numerous research studies have shown a strong association between the qualities of the parent-child relationship and children's academic performance (Kim & Page, 2013). It appears that children will perform better academically when they have a positive relationship with their parents and feel encouraged by their parents to perform well (Kim & Page, 2013). Children who are consistently in conflict with their parents or who grow up in an environment with consistent conflict are at risk of underachievement (Spilt, Hughes, Wu, & Kwok, 2012). The next section will discuss the effects that particular parenting typologies have on the parent-child relationship as well as the effects particular parenting typologies have on their children's education.

Parenting Styles and Children's Academic Achievement Parenting styles are one of the foundational components of the parent-child relationship and may therefore be important in predicting parental involvement in their child's education. Baumrind (1971) derived that there are four basic types of parenting (Authoritarian,

Permissive-Indulgent, Permissive-Uninvolved and Authoritative) and her theory has been used as the framework for numerous research studies on the topics of parents and children.

Authoritarian parents are very strict with their children, expect their children to obey the rules, and are low in parental warmth and sensitivity. Authoritarian parents are very concerned with making sure that their children show them respect, whereas Permissive-Indulgent parents express lots of parental warmth, have no boundaries for their children, and have a tendency to be 'friends' with their children.

Permissive-Uninvolved Parents show little interest in their children and more prone than other parents to be neglectful towards their children. Authoritative parents have the highest degree of parental warmth and sensitivity towards their children. Authoritative parents set limits with their children for the benefit of the child while authoritarian parents set limits with their children for the benefits of the parent. Authoritative parents are very concerned about what they believe is in the child's best interest. They incorporate discipline along with parental warmth into the relationship with their children and are invested in their children's success.

Parental warmth, parental sensitivity, control, and demandingness are major constructs in Baumrind's parenting styles (Baumrind, 1971). Authoritative parenting includes high degrees of parental warmth and sensitivity**,** while Authoritarian and Permissive-Uninvolved parenting both exhibit low parental warmth and sensitivity. Parental control is defined as the pressure parents use in order to control their children's behavior and is the opposite of parental encouragement, which is intended to direct

children's behavior (Su, et al., 2015) and is high in authoritarian parenting. Parenting practices, including expressing warmth and sensitivity towards children can vary according to the beliefs and values of that parent.

Parenting styles can affect child's academic success. Parental warmth, especially maternal warmth, seems to foster both children's academic success and children's selfesteem (Newman, et al., 2015; Stright & Yeo, 2014). While parental control is linked to children's poor academic achievement and a method more often used by uneducated compared to educated parents (Su et al., 2015). Parental control may inversely affect a child's ability to master certain educational goals, because control takes away the opportunity for children to independently problem-solve particular tasks (Su, et al., 2015).

In addition, children also do not feel encouraged and when they have high demands placed upon them by their parents. Newman, et al. (2015) examined how different parenting styles can either invoke confidence in children or invoke insecurity in children. When children receive positive messages from their parents, children appear more confident. Children who feel confident are more likely to succeed academically. Uji, Sakamoto, Adachi, Kitamura, and Toshinori (2014) have shown that authoritarian parenting, which includes high levels of control, often lowers children's academic performance. Thus, the above discussion shows that the combination of parental warmth, encouragement, and low levels of parental control and demandingness (Components of Authoritative Parenting) have demonstrated children's academic success. In contrast low levels of parental warmth and sensitivity and high levels of parental control and

demandingness (Components of Authoritarian Parenting) have demonstrated poor academic performance amongst children (Newman et al., 2015; Su, et al., 2015; Uji, et al., 2014).

Another way to measure parental warmth and parental sensitivity is to examine the degree of parental rejection. Parental rejection appears to be a robust and influential factor toward adolescents' behavior and academic performance (Dwairy et al., 2010). Meothander and Wang (2014) found that a lack of parental rejection and parental warmth were strongly related to parental attachment. Parental rejection often leads to discouraged children who are not motivated to work hard to perform well academically. Children's actions, including their academic performance, often mimics their relationship with their parents (Dwairy, et al., 2010; Mothander & Wang, 2014; Uji, et al. (2014). Positive communication between parents and children is linked to academic success. While, parental rejection is linked to poor academic performance.

While parental control takes the control from the child, it is equally important to understand the significance for children to have control in their own behaviors and academic performance. The control within children that has been proven to be advantageous for children's academic success is called effortful control. Effortful control is the child's ability to activate and regulate attention and behavior, as well as plan and integrate information for him or herself. Chen, et al. (2015) found a direct relationship between effortful control and better academic performance. Thus, parents' control and children's control influence children's educational outcomes very differently.

Cauce (2008) argues that research that examines how parenting styles vary according to culture, may actually be examining how parenting styles vary according to

socioeconomic status. For example, a quarter of African-American children live in poverty while less than 5% of white children live in poverty (Cauce, 2008). Parents who live in poverty are more likely to use authoritarian parenting (low parental warmth and sensitivity) while parents with backgrounds of higher socioeconomic status are more likely to use authoritative parenting (high parental warmth and sensitivity) (Cauce, 2008).

Children from different cultural backgrounds respond differently to different parenting styles. For example, Western children perform better academically when their parents express parental warmth and sensitivity, referred to as authoritative parenting (Newman et al.., 2015; Stright & Yeo, 2014; Watabe, 2014); while Asian children perform better academically when their parents use higher levels of parental control and demandingness, referred to as authoritarian parenting (Watabe, 2014).

When families move from East to West best parenting practices change as well. Nguyen (2008) found that Vietnamese-American children perform better when their fathers have transitioned from using authoritarian parenting, the parenting style often used in Vietnam, to using authoritative parenting, associated with higher academic performance in the United States. The contrast between the West and the East may have to do with the importance for independence in the West, which has fostered more in authoritative parenting. Asian cultures focus on the best interest for the family or the group and not on the best interest for the individual.

Parenting practices are often transferred from one generation onto the next generation Beaver and Belsky (2012) found that parents often treat their children very similar to the way they were treated as a child by their parents. Parents' attitudes toward

their children can be traced to the parents' childhoods. Kitamura, et al. (2009) found that both men and women learn how to become affectionate toward children from the attitudes of the opposite-sex parent while women learn how to respect their children's autonomy from the same-sex parent.

In summary, the culmination of research has demonstrated that parental warmth, parental sensitivity, parental control, and parental demandingness are vital constructs to consider when evaluating the relationship between children's academic performance and parenting styles. It is also important to consider how the parents' culture and family backgrounds impact their parenting practices and other beliefs, including their views on their children's education. The next section builds upon the impact that parents have on their children's education by addressing the role that parent-child attachment plays in children's academic success.

Attachment and Children's Academic Achievement

In addition to parenting practices, the parent-child relationship can also be described in terms of attachment (Ainsworth & Bowlby, 1950's). Attachment theory was developed during the 1950's, by Mary Ainsworth and John Bowlby. Their theory of attachment states that young children need a consistent, nurturing relationship with at least one primary caregiver in order for that child to develop into a mentally healthy adult (van Rosmalen, van Der Horst, & van Der Veer, 2016). According to van Rosmalen, et al. (2016), a lack of parental sensitivity to children's emotional and physical needs can contribute to psychopathology. These same authors state that attachment theory is a

major theory in developmental psychology and has been used as a theoretical lens or framework in thousands of studies.

Bowlby, considered the father of attachment theory, coined the term internal working model, (Ainsworth & Bowlby, 1991; Bretherton, 1992; Pederson, et al.., 2014, van Rosmalen, et al., 2016), which refers to an internal mental blueprint for which an individual (infant through adulthood) views his or her world and him or herself in relation to the world. The internal working model is developed during the attachment process and creates mental representations of the parent-child relationship and how trustworthy the attachment figure is. It is through these mental representations (internal working models) that an individual explores his or her emotional, social, or learning environment with anxiety or with confidence. Individuals who have healthy, secure attachments have internal working models that express confidence and security toward their emotional, social, and learning environments, while individuals who have poor or insecure attachments express anxiety toward their emotional, social, and learning environments (van Rosmalen, et al., 2016).

Attachment theory states that there are four attachment patterns; one where children feel trusted and secure in the relationship (Secure attachment) and the following three where the child feels insecure: Dismissive (Individuals do not find value in relationships), Preoccupied, also called Anxious-Ambivalent (Individuals are anxious and ambivalent toward relationships), and Fearful Avoidant (Individuals are fearful of abandonment). In 1988, Mary Main coined the term Disorganized Attachment Disorder to refer to children who fluctuated between approaching their caregiver for love and

security and being fearful of the same caregiver. Main found that these children were not comforted by their parents, while children with preoccupied attachment were anxious but demonstrated that they were able to be comforted by their parents. Internal working models or attachment patterns are formed through several mechanisms including mother's own internal attachment, mother's maturity and stressful life events. Each will be discussed below.

Attachment is linked to parenting practices, such as parental warmth and expectations, which can depend on the maturity of the mother. Porcerelli, Huth-Bocks, Huprich, and Richardson (2016) found that mothers, who had immature defense mechanisms toward their children, had children with insecure attachment, while mothers who responded with higher maturity toward their children had children with secureattachment. Mature mothers are more attuned to their children's needs and are able to focus more on caring for their children than on their own emotional reactions to their children's behaviors. Mothers who are experiencing adversity, such as struggles with their partners, economic hardship, or a lack of support have more difficulty with being able to focus on their children's needs (Porcerelli, et al., 2016). The parents' ability to focus on the needs of their children is linked to the parents' state of mind. The parents' responsiveness toward their children is also linked to attachment and the child's selfidentity.

One of the parental factors that has been studied is the mother's interpretation of her attachment to her mother and her interpretation of the attachment she formed with her children (George, Kaplan, & Main, 1985; Main, Goldwyn, & Hesse, 2002; Miljkovitch &

Danet, 2012).

Mothers who had positive experiences in their childhoods are more likely to create secure attachments with their children. It has been found that adults who are securely attached have a healthy viewpoint of their caregivers and childhood experiences. In contrast, adults who are classified as dismissing tend to not view relationships as important, adults classified as preoccupied are usually focused on their past memories of childhood, and adults classified as unresolved exhibit lapses in thought or discourse when discussing their past experiences of trauma (Miljkovitch & Danet, 2012). Attachment patterns are often repeated in the next generation through the parent's internal working model (Verhage et al.. 2016). An imperative growing number of children in the United States grow up in single parent household (Pew Research Center, 2015). Many single parents are dealing with the adjustments of marital breakup decreased household income, and the adjustment of being the child's sole-provider. These factors have been shown to significantly decrease maternal warmth and sensitivity, even when the mothers show secure-attachment within themselves (Miljkovitch & Danet, 2012). Thus, the parentchild attachment is also susceptible to the stressors that the mother is feeling. Miljkovitch and Danet (2012) also found that single parents did not necessarily lead to insecure attachment, but children raised by single-fathers showed more insecure and disorganized attachment (disruptive behaviors) patterns than children raised by singlemothers. Parental sensitivity is a major component in the parent-child relationship and vital for enhancing secure attachment for the child.

Sette, Coppola, and Cassibba (2015) found that parental sensitivity is the key component for transmission of secure-attachment onto future generations. Sette et al. (2015) found that parents who are sensitivity towards their children's need also reported their parents were sensitive to their needs when they were children. Mesman et al. (2016) found that mothers representing 26 cultural groups from 15 countries shared the same philosophy that the ideal mother is highly sensitive in their responsiveness toward her children. Thus, there is agreement amongst the different cultures on the significance for maternal sensitivity, for the benefit of the child's secure-attachment.

Attachment influences school success (Bergin & Bergin, 2009: Frankel & Bates, 1990; Main, 1983; Moss & St-Laurent, 2001; Sroufe, 2005). Bergin and Bergin (2009) found that securely-attached children have better reading and math skills than children who are insecurely-attached. In this 2009 study, Bergin and Bergin discussed a study by Kerns, et al. (2000) that found that the child's attachment to mother and father predicted academic skills in children who were third, fifth, and sixth graders. Bergin and Bergin also discussed a study by Aviezer (2002) that the child's attachment to his or her mother predicted the child's GPA and the child's scholastic attitude among Israeli sixth graders. In a 30-year longitudinal study, Sroufe (2005) demonstrated that attachment was linked to school success through the child's ability to accept and meet academic challenges with confidence. This may be because children who are insecurely-attached demonstrate less interest in learning than children who are securely-attached (Bergin & Bergin, 2009). Ramano, Babchishin, Marquis, and Frechette (2015) found that children who suffered maltreatment and had insecure-attachment demonstrated impairments in their academic

performance. Attachment influences several factors, which are vital for children's academic success.

For example, a securely attached child is better able to explore his or her learning environment with confidence, and to self-regulate his or her emotions and behavior in a school setting (Sroufe, 2005; van Rosmalen, et al., 2016; Kim & Page, 2013; Brumariu, 2015). Emotion regulation in children can be due to abuse and/or neglect in a child's past or present life, which disrupts the forming of secure bonds (O'Neill, Guenette, Kitchenham, 2010). These same children are often diagnosed with ADHD and are often misunderstood for their inability to control their emotions or behavior. Children who self-regulate their emotions and behavior demonstrate higher academic performance (Kim & Page, 2013).

Wood (2007) reported that early secure attachment can also enhance positive relationships with peers, which may motive children to engage more in school and leading to relatively greater academic competence. Sroufe (1996) found that securely attached children, compared to those who are insecurely attached, also have more confidence. Confidence is more predictive of academic performance than intelligence (Sroufe, 2005).

As discussed earlier, parent-child attachment creates an internal working model within an individual. There is research on the transmission of attachment from one generation onto the next generation. Research has also shown that there is a link between the child's attachment and the child's academic performance. One pertinent question that this study will address is does the parent's childhood experience of their attachment have an effect on their involvement in their child's education?

Summary: Gap in the Literature

Numerous studies have discussed the strong connection between parental involvement and children's academic success (Blair, 2014; Green, et al., 2012; Hill and Tyson, 2009; Nihat, Sad, and Gurbuzturk, 2013). Educators and practitioners have used this robust body of research in order to implement programs that would increase academic success amongst students. Many educators have created programs at their schools in attempts to reach out to parents to increase parental involvement and ultimately enhance children's academic success. It is vital to understand the factors that influence parents to become involved in their children's education. Green, et al. (2012) found that there is little known about the characteristics of the parents who are more involved in their children's education. There is a gap in the literature, which examines the characteristics of parents, who participate in their children's education. An important component that is missing in the literature is an understanding of the relationship between parents' internal attachment, parenting styles, and parental involvement in association with children's academic success.

Chapter 3: Methodology

Introduction

As previously stated in Chapter 2, there is a gap in the literature that examine the characteristics of parents who are involved in their children's education. There is also a gap in the literature, which examines the parental involvement and its association with parenting styles, parents' internal attachment patterns, and children's academic success. The purpose of this cross-sectional, quantitative study was to examine the relationship between parental involvement, parenting styles, parents' internal attachment patterns, and children's academic success. The study consists of two mediation models.

The first mediator variable model examined the mediating effect of parental involvement (mediator variable) on the relationship between parental internal attachment patterns (IV) and children's academic success (DV). The second mediator variable model examined the mediating effect of parental involvement on the relationship between parenting styles (IV) and children's academic success (DV). This chapter consists of the research design, description of the participants, the instruments used for data collection, the purpose, the methodology, and the ethical considerations.

Research Design and Rationale

Parents can affect their children's academic success in a number of ways. Parents who live in poor neighborhoods are subject to sending their children to schools that perform academically poorly and provide a poor education to children (Bellei, 2013; Glazzard, 2014; Jackson & Hilliard, 2013; Johnson, 2014; Kawai et al., 2014; Russo,

2005; Schwebel, 2012). Parents who have poor educational backgrounds often do not feel qualified to engage in their children's learning (Sime & Sheridan, 2014; Thomas, 2010). Parenting styles, which consist of higher degrees of parental warmth and parental sensitivity have been shown to foster children's academic success (Newman, et al., 2015; Stright, et al., 2014). Newman et al. (2015) examined how different parenting styles can either invoke confidence in children or invoke insecurity in children, which directly affects children's academic success. Attachment, formed through the parent-child relationship, has also shown to influence a child's academic success, including better reading and math skills and higher GPA's overall (Bergin & Bergin, 2009; Frankel & Bates, 1990; Main, 1983; Moss & St-Laurent, 2001; Sroufe, 2005).

Out of all these variables, parental involvement appears to be the most instrumental variable that affects children's academic success (Billman et al., 2005; Blair, 2014; Epstein, 2001; Henderson & Mapp, 2002; Hill & Craft, 2003; Hill & Tyson, 2009; Huang & Mason, 2008; Jeynes, 2005; Overstreet, et al., 2005; Sawyer, 2015). In addition to the researchers mentioned in the previous statement, Walker, et al. (2010) and Grolnick (2015) have also found that parental involvement is vital to children's academic success.

Some of the variables examined in the literature in understanding the motivating factors behind parental involvement includes the parent's level of education, parents' attitudes toward their children's education, and communication between parents and teachers. Parents who have a higher level of education are often more involved with their children's education than parents who have a lower level of education (von Otter, 2014;

Steinmayer, 2010; Wang, 2014). There seems to be a direct link between parents' attitudes and children's performance in school (Quilliams & Beran, 2009). Another important link in children's academic success involves parents and teachers communicating with understanding of their expectations as well as their personal challenges (Cook, Shepherd, Cook, and Cook, 2012; Shirvani, 2007). In addition, parents and teachers can have very different definitions and expectations of parental involvement (Young et al., 2013).

One of the gaps in this large body of literature is determining some of the core characteristics of parents who partake in their children's education. For example, is there a relationship between parenting styles and parental involvement? There is also a lack of research, which examines the relationship between parents' internal attachment (the attachment the parents formed in their childhoods) and parental involvement.

In this study, there are two mediator models where parental involvement is the mediator variable. In the first model, parents' internal attachment is the independent variable and is a categorical variable. In the second model, parenting styles is the independent variable and is a categorical variable. In both models, the dependent variable is children's academic success and is a binary variable expressed as Pass/Fail. The dependent variable (children's academic success) was also converted to a continuous variable (children's GPA's, ranging in scores from 75 to 95). There are four categories within parenting styles, Authoritarian, Authoritative, Permissive-Indulgent, and Permissive-Uninvolved. There are four categories within parents' internal attachment,

Secure-Attached, Fearful (formerly Avoidant), Preoccupied (formerly AnxiousAmbivalent), and Dismissive. Children's academic success was measured as having a minimum grade of 75 in all three core subjects of reading, language arts, and mathematics.

Population

As mentioned in Chapter 2, studies have shown that the school years, first through fifth grades, are most responsible for setting a foundation for academic success and are also the same years where parental involvement is the highest (Alivemim & Lucidi, 2011; Duchesne, Vitaro, Larose, & Tremblay, 2008; Fitzpatrick, Archambault, Janosz, &
Pagam, 2015). Therefore, this study focused on elementary school children's academic success.

Participants were parents or legal guardians who have a child 7 to 11 years of age enrolled in elementary school. Participants were recruited from two cities, familiar to me, that are located in the western United States. One city (City A) has a population of approximately 233,000 and its typical elementary school has 598 students. The demographics of the public schools in City A consists of: Whites: 60%, AfricanAmericans: 2%, Hispanics: 27%, Asian-American: 7%, Multiracial: 3%, AmericanIndian: .6%, and Pacific-Islander: .8%. The second city (City B) has a population of approximately 457,000 and its typical elementary school has 418 students. The demographics of the public schools in City B consists of: Whites: 70%, AfricanAmerican: 6%, Hispanics: 17%, Asian-American: 3%, Multiracial: 4%,

American-Indian: .5% , and Pacific-Islander: .2%. The demographics and the socioeconomic status amongst the students who attend these schools in both cities fall into three major categories: poverty, low-income, and middle-class income based on the federal schoollunch guidelines.

Sampling and Sampling Procedure

A convenient sampling strategy was used for recruitment of participants for the study. Snowball sampling was also a sampling strategy used for recruitment of participants in this study. Principals from each of the eight schools in these two cities have agreed to inform parents, (Appendix A) through notices sent directly to the parents, announcements in school email accounts for the parents, and announcements through parent-teacher newsletters, of the opportunity to participate in this study. It was agreed by the principals that the schools and the school districts would not be mentioned in this study (Appendix A). The parents completed an online survey posted on Survey Monkey. Parents or legal guardians who have more than one child 7 to 11 years of age were instructed to answer the study's questionnaires for one child only. Participants were provided with specific directions on how to complete their surveys and their child's grade questionnaire as well as specific instructions on how to submit to Survey Monkey.

Participants for the study must meet the following criteria:

- Parents must have a biological or adoptive child seven to eleven years old and currently attending one of the schools.
- Legal Guardians who parent a child seven to eleven years old and their child is currently attending one of the schools.

- The child lives with the parent who is participating in the study at least 50% of the time during the school year.
- The parent has access to a computer and is capable of completing the study.

The exclusion criteria for the study contains four factors

- The child is home-schooled.
- The child lives with the parent who is participating in the study less than 50% of the time during the school year.
- The parent does not have access to a computer.
- The child is not a biological or adopted child of the parent who is participating in the study.

Power Analysis and Sample Size

In order to calculate sample size for a particular study, the researcher needs to include in the equation, power, effect size, and the confidence interval. Power is measured as the probability of rejecting a false null hypothesis. In a mediation model, effect size is measured or determined from the amount of variance the mediator variable has on the association between the independent variable and the dependent variable. In other words, how much does the mediator variable change the relationship between the independent variable and the dependent variable? Multiple regression was used to calculate the effect size in this study. The confidence interval or alpha is defined as the probability that the results can be reliably replicated and was set at .05. power is set at

.80, a medium effect size (f^2 =0.15), and 4 independent and dependent variables; G*Power, developed by Erdfelder, Faul, and Buchner (1996), has determined the required sample size is 85.

Procedures for Recruitment and Participation

Principals from different public and private schools in these cities (Appendix A) agreed to inform parents who fit the criteria about this opportunity through the school's email account for parents as well as written notification sent home to parents. Parents who were interested in the study were directed to the online survey hosted by Survey Monkey. The parent then read the informed consent form (Appendix B) explaining the participant's right to voluntarily participate in the study, and that full confidentiality and their right to privacy will be upheld at all times. Participant's consent occurred when the participant clicked "Yes" to proceed to the survey. All information is confidential.

Instrumentation

Parents' Internal Attachment Patterns

Adult attachment refers to an adult's internal working model that manifests in self-confidence and security or a lack of self-confidence and a lack of security to interact with his or her emotional, social, and working environments (Ainsworth & Bowlby, 1991; Bretherton, 1992; Pederson, et al.., 2014, van Rosmalen, et al., 2016). There are generally three types of measures for assessing adult attachment: interviews, Q-Sort Assessments, and questionnaires (Lopez, 2003). Although, the Adult Attachment Interview (AAI) is the most popular, it is highly recommended to use in a semi-structured interview (Jones-Mason, Allen, Hamilton, & Weiss, 2015). The Q-Sort assessments

refers to an alternative scoring method of the AAI. Hazen and Shaver (1987) recognized (a) that the Adult Attachment Interview was the most used instrument for assessing adult attachment styles/patterns and (b) the need for a self-report questionnaire for assessing adult attachment styles/questionnaires.

Hazen and Shaver (1987) developed the attachment measure, using questions based on three attachment styles categorized and designed by Ainsworth and Bowlby. They include Secure-an individual finds it relatively easy to trust and feel as if they can explore their learning and emotional environment with a sense of security; Avoidant-an individual who finds it difficult to trust others or new situations, and Anxious/Ambivalent (Preoccupied)-is an individual who is almost always anxious about others, relationships, and new situations.

Bartholomew and Horowitz (1991) created the Relationship Questionnaire and added a fourth category in order to distinguish the differences within avoidant attachment in Hazen and Shaver's (1987) model and the fourth category also matches more closely to the Adult Attachment Interview (AAI) as well as other attachment assessments. Secure, preoccupied, anxious-ambivalent, and avoidant (fearful) have been defined in the above paragraph. Dismissive attachment is defined as an individual who does not find value in relationships and seeks to find independence in all areas of his or her life. In order to measure anxiety and avoidance more closely, Griffin and Bartholomew (1994) modified the Relationship Questionnaire creating the Relationship Scales Questionnaire. The Relationship Scales Questionnaire (RSQ) (Appendix E) was created by using statements from Hazen and Shaver's (1987) attachment measure, Bartholomew and

Horowitz's (1991) Relationship Questionnaire, and Collins and Read's (1990) Adult Attachment Scale (Griffin & Bartholomew, 1994). Participants answer 30 statements on a five-point Likert scale, ranging from "not at all like me" to "very much like me." The questions correspond to the four subtypes of attachment, secure, fearful (formerly avoidant), preoccupied (formerly anxious-ambivalent), and dismissive.

For example, Question 3, "I find it easy to get emotionally close to others", belongs to the subscale: Secure Attachment. While question 1, "I find it difficult to depend on other people", belongs to the subscale: Fearful Attachment. The RSQ is scored by taking the averages of the answers for the questions that correspond to that particular subscale. For example, the score for the secure subscale is calculated by taking the average of the answers to questions 3, 9(Reverse), 10, 15, and 28(Reverse). Questions 9, 28, and 6 are reverse-scoring questions, which need to be inverted before taking the averages. Then the researcher determines which of the four subscales contain the highest score, which determines the attachment pattern for that participant. The RSQ was chosen for this study due to its design for adult attachment patterns to be a continuous variable rather than a categorical variable. Another reason the RSQ was chosen for this study is its user friendliness. The RSQ is scored by taking the averages of each of the subscales within the test. The scores on the RSQ have been shown to be both reliable and valid.

Convergent validity was demonstrated by the moderately high correlations within each attachment dimension and discriminant validity was demonstrated by relatively small correlations between attachment dimensions (Griffin & Bartholomew, 1994). In

addition, Klohen and John (1998) tested the validity of the RSQ by obtaining interrater scores among experts. The experts achieved strong interrater agreement, ranging from .85 to .94, and the consensual prototype descriptions represent the experts' collective theoretical conceptions of each of the four categories of attachment (Klohen & John, 1998). The reliability of the RSQ has been reported as .65 for each of the four subscales (Crowley, Fraley, & Shaver, 1999).

Parenting Styles

Baumrind's (1971) four parenting typologies have been used in a wide array of research studies. Parenting styles can affect child's academic success. Parental warmth, especially maternal warmth, seems to foster both children's academic success and children's self-esteem (Newman, et al., 2015; Stright, et al., 2014) Saunders, Hume, Timperio, and Salmon (2012) have found that categorizing parental responsiveness (Parental Warmth) and parental demandingness creates a comparison of the four parenting styles: Permissive-Indulgent, Permissive-Uninvolved, Authoritarian, and Authoritative. Saunders et al. (2012) aligned their parenting style scale with Baumrind's typologies. For example, Authoritative Parents have the following characteristics: high warmth/nurturing, high maturity demands on their children, high control of their children's behavior, and high communication between parent and child. Authoritarian Parents: low parental warmth/ low nurturing, high maturity demands on their children, high control of their children's behavior, low communication between parent and child, permissive-indulgent parents: high warmth/ nurturing, low in maturity demands on their children, low in control of their children's behavior, and high in parent-child

communication. and permissive-uninvolved parents: low warmth/low in nurturing, high maturity demands on their children, low control on their children's behavior, and low in parent-child communication.

The Parenting Style Scale (Appendix F) was designed not only to recognize distinct differences in parenting styles but also to measure the consistency of parenting over developmental ages. Each style differs in natural occurring patterns of parental values, practices, and behaviors (Saunders et al., 2012). The Parenting Style Scale survey consists of 19 items, which are divided into the four parenting styles: PermissiveIndulgent, Permissive-Uninvolved, Authoritative, and Authoritarian. Each item is on a five-point rating scale (Never (1), Rarely (2), Sometimes (3), Often (4), and Always (5)) for each question. Every participant is scored on each of the four parenting styles. The items in the scale measure two major categories, responsiveness and control. For example, a parent who scores high in both responsiveness and control is categorized an authoritative parent. A parent who scores low in both responsiveness and in control is categorized a permissive-uninvolved parent. A parent who scores high in responsiveness and low in control is categorized a permissive-indulgent parent. A parent who scores low in responsiveness and high in control is categorized an authoritarian parent. For example, question 6 "I am consistent with my discipline techniques" refers to the authoritative parenting style because it shows high responsiveness and low in control; while question 14, "I have the final say with my child", refers to the authoritarian parenting style because it shows low in responsiveness and high in control. Question 4, "I make decisions in consultation with my child", refers to permissive indulgent and question 18,

"My child nags me into changing my mind", refers to permissive-uninvolved. There are no reverse-scoring questions. The scores from the questions for each subscale are averaged. The highest score of the four styles determines the parenting style for that particular parent.

The parenting style scale is based upon Diana Baumrind's parenting styles, so the scale has construct validity in relation to measuring parenting styles. The validity coefficient for criterion validity was found to be 0.80 for the responsiveness subscale and 0.76 for the control subscale. The test-retest reliability of the responsive subscale is 0.81 and for the control subscale is 0.83 (Gafoor & Kurukkan, 2014).

Parental Involvement

One of the challenges with measuring parental involvement is that there is little agreement amongst researchers and educators about how to define parental involvement (Ringenberg, Funk, Mullen, Wilford, & Kramer, 2005). Epstein (1992) derived six constructs to measure parental involvement: a) parenting, b) communication, c) volunteering, d) learning at home, e) decision-making, f) collaborating with the community (Ringenberg et al. 2005). The parenting construct addresses the degree that the home environment supports the child's cognitive development. The communication construct examines the parent-teacher communication about the child's academic progress. The volunteering construct refers to the school activities that the parent is present. The learning at home construct examines the degree that the parent is involved in their child's homework and other school activities performed at home. The decisionmaking construct refers to the degree that the parent actively participates in

creating the school environment. The collaborating with the community construct examines the degree of parents' awareness to the community's resources as well as the parent's usage of the community resources.

The Parent and School Survey (PASS) (Appendix G) incorporates Epstein's six constructs into its questionnaire. For example, question 4, "I frequently explain difficult ideas to my child when she/he doesn't understand", refers to the parenting construct and question 3, "If my child misbehaved at school, I would know about it soon afterward", refers to the communication construct of Epstein's constructs for parental involvement.

The Parent and School Survey was designed to accurately and easily measure parental involvement within approximately ten minutes (Ringenberg, 2017, 2005). The instrument consists of 30 questions, answered on a Likert scale of 1) strongly agree 2) agree, 3) partially agree and partially disagree, 4) disagree, and 5) strongly disagree. Six questions (6, 8, 16, 17, 18, 20) have reverse-scoring, which 'strongly disagree' is the most positive response. One example of reverse scoring questions is question 6 Talking with my child's principal makes me uncomfortable, which strongly disagree is the most positive response. The total score from each of the 24 questions determines the degree of parental involvement for that participant.

PASS has been recognized in the field as an instrument consisting of high validity due to its conceptual framework of Epstein's model, which contains the most clearly and thoroughly articulated definition of parental involvement. The most current research on the validity and reliability of the parent and school survey only states that the instrument

measures validity as high due to its questions being based on Epstein's model of the attributes that define parental involvement (Rigenberg, Funk, Mullen, Wilford, & Kramer, 2005). In this article, (Ringenberg, et al. 2005) goes on to say that although further testing might reveal the need to alter particular items, that it is likely that the most serious psychometric limitations of the PASS have already been addressed. In addition, Ringenberg, et al. (2005) conducted intraclass correlation coefficients (Bartko, 1991) for each of the 24 items on the PASS. It was found that nine items measured as excellent, nine items measured as good, two items measured as fair and four items measured as poor. The PASS has been modified to adjust for these four questions and increase the instrument's reliability.

Child's Academic Success

Parents were asked to record their child's grades on a questionnaire, using the most recent report card from the completed school year. For example, if the child is currently in the middle of their third grade, parents will submit their child's grades from second grade. The child's grades in reading, language arts, and mathematics, the core subjects found on standardized tests and used to determine level of proficiency for each student (Renshaw, et al. 2009; Reyes, et al.. 2012; Swanson, Valiente, & LemeryChalfant, 2012; Zychinski & Polo, 2012) was averaged over the current school year Letter grades was converted to numerical grades that fall in the middle of that scale, for example, an A equals 95, B= 85, C= 75 D = 65, F= Below 65. Swanson, Valiente and Lemery-Chalfant (2012) have used children's academic grades to measure academic success. In addition, Renshaw et al. (2009) and Swanson et al., (2012) have

found that children's academic grades in core subjects of reading, language arts, and mathematics are comparable to children's scores on standardized tests and that children's academic grades are a valid measure for children's academic success. Children's academic success was defined as a minimum grade of 75 in each of the three subjects: reading, language arts, and mathematics for the child's most current completed school year.

Operationalization of Variables

This study contains two mediator models. In both models, the dependent variable is children's academic success and in both models, the mediator variable is parental involvement. The dependent variable, children's academic success was operationalized as having a minimum grade of 75 percent in all three subjects of reading, language arts, and mathematics for the child's most current school year that the child has completed. The mediator variable, parental involvement was operationalized as the score on the parent and school survey instrument.

In the first mediator model, the independent variable is Parental Internal Attachment Patterns and is a categorical variable. The Relationship Scales Questionnaire was used to measure Parental Internal Attachment Patterns, which consists of four categories: secure-attached, preoccupied (formerly called anxious-ambivalent), fearfulavoidant, and dismissive. The ultimate or best category is the secure-attached. In the second mediator model, the independent variable was parenting styles and is a categorical variable. The parenting style scale was used to measure parenting styles, which consists of four parenting categories: permissive-indulgent, permissiveuninvolved,

authoritative, and authoritarian. The ultimate or best category is the authoritative category.

Software

SPSS version 23 (IBM, 2016) is the software that was used for analyzing the data in the study. SPSS version 23 (IBM, 2016) provides syntax that has the ability to determine if the data has been manipulated as well as the ability to produce tables, charts and calculates statistical significance for the data in the study. There was a different syntax code produced for each of the variables inputted into the software package. SPSS tests to determine errors that the researcher may have to address.

Data Cleaning

Participants completed an online survey (using Survey Monkey) that consisted of three survey-instruments and their child's grade questionnaire. The results of the study were dependent upon the completion and accuracy of the participants' responses. Missing Value Analysis on SPSS Version 23 (IBM, 2016) was used to determine if there is any missing data. In regards, to "your child's grade questionnaire" (Appendix C), the packet was not used in the study if data was missing. If a participant did not complete one of the surveys, the participant's packet was not used in the study. Each survey instrument had subscales. It was vital for every participant to answer the questions in each subscale of every survey-instrument. If any subscale was missing more than onefourth of the questions for that particular subscale, that participant's packet was not used in the study. For example, it there are only eight questions to a particular subscale, a participant can only miss one question in that subscale otherwise, it was not used in the

study. If the missing data for any subscale consisted of less than one-fourth of the data for that particular subscale, then imputation was used by averaging the scores for that particular subscale. For survey-instruments that do not have subscales, such as (PASS), and it is missing more than seven questions, one-third of the survey, the participant's packet was not used in the study. If there is missing data for seven questions or less on any of the surveys, the missing data was calculated by averaging the scores for the answered questions on that particular survey. For example, if seven responses are missing on the PASS (Appendix G), the researcher averaged the scores for the answered questions and used the average score to complete the missing responses. In another example, if a participant answered '3' for the majority of the questions, a '3' was filled in for the missing data. Accurate data was needed to answer each of the research questions.

Research Questions and Hypotheses:

The research questions and hypotheses 1-4 are restated here, so that the reader can assess the analysis of the hypotheses.

Research Question 1: What is the relationship between parent's internal attachment patterns (secure, preoccupied, fearful, and dismissive) as measured by the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994) and parental involvement as measured by the Parent and School Survey (PASS; Ringenberg, 2017, 2005)?

$H_0$1 = There is no relationship between parent's internal attachment (IV) measured using the relationship scales questionnaire and parental involvement (DV) is being measured using the parent and school survey.

$H_1$1 = There is a relationship between parent's internal attachment (IV) and parental involvement (DV).

Research Question 2: What is the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-uninvolved) as measured by the Parenting Style Scale (PSS; Saunders et al., 2012) and parental involvement as measured by the Parent and School Survey (PASS; Ringenberg, 2017, 2005)?

$H_0$2 = There is no relationship between parenting styles (IV), a categorical variable measured using the parenting style scale and parental involvement (DV) was measured using the parent and school survey.

$H_1$2 = There is a relationship between parenting styles (IV) and parental involvement (DV).

Research Question 3: What is the relationship between parent's internal attachment patterns (secure, preoccupied, fearful, and dismissive) as measured by the Relationship

Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994) and children's academic success as measured by numerical grades of 75 to 95 in Language Arts, Reading, and Mathematics for the most current completed school year to acquire the category of academic success?

$H_0$3 = There is no relationship between parent's internal attachment (IV) measured using the relationship scales questionnaire and children's academic

success (DV) measured as a minimum grade of 75 in reading, language arts, and mathematics for the most current completed school year.

$H_1$3 = There is a relationship between parent's internal attachment (IV) and children's academic success (DV).

Research Question 4: What is the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-uninvolved) as measured by the Parenting Style Scale (PSS; Saunders et al., 2012) and children's academic success as measured by numerical grades of 75 to 95 in Language Arts, Reading, and Mathematics for the most current completed school year to acquire the category of academic success?

H_o4 = There is no relationship between parenting styles (IV) a categorical variable measured using the parenting style scale and children's academic success (DV) measured as a minimum grade of 75 in reading, language arts, and mathematics for the most current completed school year.

$H_1$4 = There is a relationship between parenting styles (IV) and children's academic success (DV).

Hypotheses 1 through 4 were tested with linear regression, while controlling for child age and gender, and parental gender. For hypotheses 1 and 2, parental involvement was the dependent variable and parental styles and parental attachment were the independent variables. For hypotheses 3 and 4, academic success was the dependent variable and parental styles and parental attachment were the independent variables.

Linear regression analysis was used to test for correlations when the dependent variable in a research study is a continuous variable. In this study, the dependent variable, children's academic success, was measured as successful by obtaining a minimum score of 75 in all three subjects (reading, language arts, and mathematics) or being unsuccessful by not obtaining a minimum score of 75 in all three subjects (reading, language arts, and mathematics) and therefore is a binary variable. The challenge in this study was that all the participants had children who had a *Pass* for their response/outcome and correlations cannot be determined without variance in both variables. Therefore, the researcher converted the dependent variable (children's academic success) from a binary variable to a continuous variable (children's GPA's) ranging in scores from 75 to 95.

Hypotheses 5 and 6 are restated here, in order to make it more accessible for the reader to follow the analysis of these two hypotheses.

Research Question 5: What are the mediating effects of parental involvement as measured by the Parent and School Survey (PASS; Ringenberg, 2017, 2005) on parents' internal attachment patterns (secure, preoccupied, fearful, and dismissive) as measured by the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994) and children's academic success as measured by numerical grades of 75 to 95 in Language Arts, Reading, and Mathematics for the most current completed school year to acquire the category of academic success?

$H_0$5 = Parental involvement (mediator) measured using the parent and school survey does not mediate the relationship between parents' internal attachment (IV) being

measured using the relationship scales questionnaire and children's academic success (DV) being measured as a minimum grade of 75 in reading, language arts, and mathematics for the most current completed school year.

$H_1$5 = Parental involvement (mediator) does mediate the relationship between parents' internal attachment (IV) and children's academic success (DV).

Research Question 6: What are the mediating effects of parental involvement as measured by the Parent and School Survey (PASS; Ringenberg, 2017, 2005) on parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-uninvolved) as measured by the Parenting Style Scale (PSS; Saunders et al., 2012) and children's academic success as measured by numerical grades of 75 to 95 in Language Arts, Reading, and Mathematics for the most current completed school year to acquire the category of academic success?

H_0*6*= Parental involvement (mediator) being measured using the parent and school survey does not mediate the relationship between parenting styles, a categorical variable (IV) being measured using the parenting styles scale and children's academic success (DV) being measured as a minimum grade of 75 in reading, language arts, and mathematics for the most current completed school year.

$H_1$6 = Parental involvement (mediator) does mediate the relationship between parenting styles (IV) and children's academic success (DV).

Hypotheses 5 and 6 test mediation (See figures 1 and 2). A mediation model shows the path for the relationship between the independent variable and the dependent variable. For example, a mediation model determines if the mediator variable strengthens

or weakens the relationship between the independent variable and the dependent variable. In this study, there are two independent variables: Parental Internal Attachment Patterns and Parenting styles. The dependent variable is Children's Academic Success. Parental Involvement is the mediator variable in two different models. The first model determined if parental involvement mediates the relationship between PIA (Parental Internal Attachment) and CAS (Children's Academic Success). The second model determined if parental involvement mediates the relationship between PS (Parenting Styles) and CAS. The figures below demonstrate the two mediator variables.

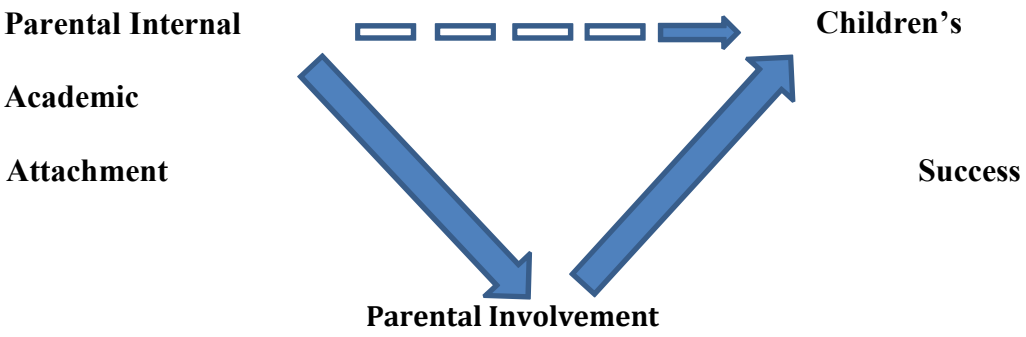


Figure1. Mediating model of parental involvement on parents' internal attachment and children's academic success

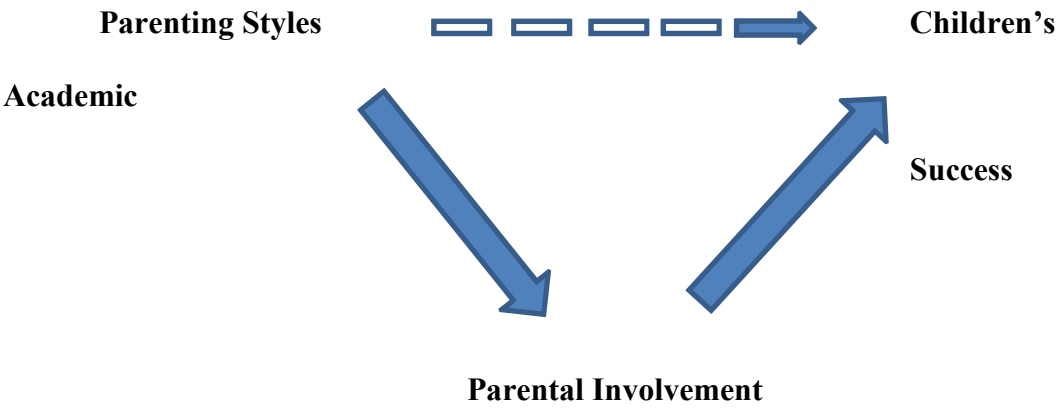


Figure 2. Mediating model of parental involvement on parenting styles and children's academic success.

Hypotheses 5 and 6 were tested using linear regression, a statistical test used to test whether a mediator variable affects the relationship between the independent variable and the dependent variable. Baron and Kenny (1986) describes a three-step process to test for mediation. In this study, the first step according to Baron and Kenny (1986) would be to test the association between Parental Internal Attachment/Parenting styles and Children's Academic Success. The second step tests if Parental Internal Attachment/Parenting styles predicts Parental Involvement. The third step determines the significance of the mediator variable. Two things must be true in order to have mediation: 1) Parental Internal Attachment (first model) and Parenting Styles (second model) must predict Parental Involvement and 2) The effect of Parental Internal Attachment (first model) and Parenting Styles (second model) on Children's Academic Success must decrease when Parental Involvement is used.

Children's Academic Success, the dependent variable in this study is a binary variable and was measured as successful (75 in Reading, Language Arts, and

Mathematics) or not successful. Children's Academic Success was also converted to a continuous variable (children's GPA's) ranging in scores from 75 to 95. Regression was used to test for outliers, which will be determined as any child's grades that fall within two standard deviations of the regression line. It was also important to test for normal distribution.

Limitations to the Study

One of the major limitations to online data collection is that the researcher does not know who actually completed the surveys. A major limitation to self-report surveys is determining the accuracy of the responses from the participant. For example, respondents will answer questions according to their understanding of the particular questions being asked. Some respondents might give socially desirable answers.

Additional limitations to this study include my choice of instrumentation for the study. The survey- instruments may not have been the best fit for the particular sample in the study. For example, some participants may have difficulty with the wording of some of the questions and therefore, they did not answer the question accurately. Another challenge is whether the survey-instruments in the study accurately measured the variables examined in the study. The sample chosen may skew the results to the study. For example, some participants may have English as a second-language and therefore either answered the question in the manner that they understood the particular question, which gives the potential for inaccuracy. There is also potential for low external validity of the study due to the sample being too narrow in scope and not representing the larger population.

Another challenge to the results of the study are the delimitations to the study. Some of the delimitations to this study include the narrow scope of the samplepopulation, the limited literature on this particular topic, and using a cross-sectional and quantitative design. There is potential for obtaining different data with a longitudinal design. There is also potential for obtaining different data with a qualitative design versus a quantitative design.

Ethical Considerations

Participants reported their child's grades, using the end of the year report card, for the most current completed school year and completed the survey on-line. All information is confidential and participants will remain anonymous. I understand the significance of confidentiality for each of the participants. I implemented the steps necessary to uphold the participant's confidentiality as well as the participant's rights to privacy. All of the data were coded in a manner that alleviated any identification of the participant. The Informed Consent form (Appendix B) explained to the participants their right to withdraw from the study at any time. In addition, each participant had contact information for crisis lines and other available resources in their areas. Some of the potential risks for participants pertaining to recruitment of participants may include experiencing uncomfortable emotions, such as anger, guilt, or frustration due to the questions triggering past scenarios or participants sharing their personal information or their surveys with other potential participants. The recruiting announcement stated that no personal names, no schools, and no school districts were mentioned in the study. Since no schools were mentioned in the study, there is no benefit or loss to the school to have parents participate or not to participate in the study. Potential benefits for

the participants include the possibility of feeling good and feeling proud for their accomplishments with their children as well as feeling proud of their children for their accomplishments. Additional benefits are the potential for the participants to take the time to reflect on the questions and to incorporate more positive interactions with their children. There is also the potential for the participants to bring more awareness to others in the community to incorporate stronger positive interactions between parents and children in reference to increasing children's academic success. The findings in this study may have the potential for understanding the challenges for some parents to be involved in their children's education, which then influences children's academic success, and may benefit the society. The Walden University Institutional Review Board approved this study (03-23-18-0371023) and it expires on March 22, 2019.

Protection of Participants' Rights

A written informed consent form was provided to each participant, stating their rights as mentioned earlier. Participants' rights include understanding the purpose of the study, their right to withdraw from the study at any time, their right to confidentiality, their right to contact support for any distress from partaking in the study, and their right to receive the results from the study after the study has been completed. All participants were parents. Children were not directly involved in this study. The names of schools were not identified in the study and staff from schools are not involved in this study. There is no participant identifying information made available in this study. All surveys have a study ID number. Only the researcher has access to any data collection. All the

information is stored on a private and secure email account. The collected data does not have any identifying information, including names, phone numbers, or addresses.

All data has been saved on a password protected flash drive designated only to this study and stored in a locked file cabinet. The receipt of the completed surveys will verify receipt of the consent form and agreement to participate in the study.

Summary

This quantitative and cross-sectional study evaluated two mediation models in order to understand the relationship between parent's internal attachment patterns, parenting styles, and parental involvement in relationship to children's academic success. Participants completed three online surveys and their child's grade questionnaire using their child's report card for the most current completed school year for that child. Data on the first independent variable, parent's internal attachment, was collected using the Relationship Scales Questionnaire. Data on the second independent variable, parenting styles, was collected using the Parenting Style Scale Survey. Data on the mediating variable, parental involvement, was collected using the Parent and School Survey instrument. The dependent variable, children's academic success, was operationalized by a minimum grade of 75 for reading, language arts, and mathematics for the child's most current completed school year. For example, if the child is currently in the fourth grade, then the child's grades for his or her third grade was used to determine academic success. Pearson's correlation was used to test hypotheses 1-4. Linear regression was used to test hypotheses 5 and 6.

Chapter Four discusses in detail the analysis of the data as well as the findings from the study. Chapter Four reviews the instruments and statistical tests that are discussed in chapter three and explains the procedures of the specific analysis of the data to arrive at the study's findings. In addition, chapter four discusses the generalization in reference to the population chosen for the study. Chapter Four also includes tables and figures to demonstrate the significance of the study's findings. Lastly, chapter four discusses the results to the research questions and their significance.

Chapter 4: Results

Introduction

The purpose of this cross-sectional quantitative study was to examine the relationship among parental involvement, parents' internal attachment patterns, parenting styles, and children's academic success. Two mediation models were evaluated. The first model tested whether parental involvement has a mediating effect on the relationship between parents' internal attachment patterns and children's academic success. The second model tested whether parental involvement has a mediating effect on the relationship between parenting styles and children's academic success. Data were collected through a 15-minute online survey that parents completed using Survey Monkey.

The following research questions and hypotheses were addressed in the study:

1. What is the relationship between parent's internal attachment and parental involvement?
2. What is the relationship between parenting styles and parental involvement?
3. What is the relationship between parent's internal attachment and children's academic success?
4. What is the relationship between parenting styles and children's academic success? 5. What are the mediating effects of parental involvement on parents' internal attachment and children's academic success?
6. What are the mediating effects of parental involvement on parenting styles and children's academic success?

$H_0$5 = Parental involvement (mediator) being measured using the parent and school survey does not mediate the relationship between parents' internal attachment (IV) being measured using the relationship scales questionnaire and children's academic success (DV) being measured as a minimum grade of 75 in reading, language arts, and mathematics for the most current completed school year. $H_1$5 = Parental involvement (mediator) does mediate the relationship between parents' internal attachment (IV) and children's academic success (DV).

$H_0$6= Parental involvement (mediator) being measured using the parent and school survey does not mediate the relationship between parenting styles, a categorical variable (IV) being measured using the parenting styles scale and children's academic success (DV) being measured as a minimum grade of 75 in reading, language arts, and mathematics for the most current completed school year. $H_1$6 = Parental involvement (mediator) does mediate the relationship between parenting styles (IV) and children's academic success (DV).

Data Collection

The time frame for the data collection, recruitment, and response rates took approximately six weeks. One of the challenges and discrepancies in data collection from the plan presented in chapter 3 was that two of the elementary school principals did not follow through on their original agreement to advertise the study at their schools. In the original data collection plan (chapter 3), I stated that I would use Facebook; in the actual data collection, I had several individuals post my flyer on their Facebook accounts. Another strategy that I added in my actual data collection was that I posted flyers at my

chiropractor office, my bank, and other public-bulletin boards. I also posted a flyer about the study and announcements at local colleges. Due to the anonymity of my study, I do not have the ability to determine where the actual participants came from.

The sample of participants included in the study consisted of 85 parents of elementary school children (see Table 1) ages 7 to 11 years old. All of the participants lived in either the Colorado Springs, Colorado area or the Reno, Nevada area. Only one of the participants was a legal guardian of her child. The other 84 parents were either biological or adoptive parents of their children. Approximately eighty-six percent or seventy-three participants were mothers and 12 participants (12.9%) were fathers. Fortyseven percent of the participants were in the 30 to 40 years of age range and 38.9 percent of the participants are in the 40 to 50 years of age range. The participants in the 20 to 30 years of age range was the smallest group made up of 12 individuals.

Another interesting characteristic of the sample is the annual income of the participants in this study. The majority of the participants (48.2%) have an annual income of greater than $60,000 (see Table 1). The nation's median family income is $71,062 (US Census, 2017). Approximately fourteen (14.1) percent of the participants have an annual income of $30,000 to $40,000. Only thirteen participants (15.3%) of the participants earn an annual income of less than $30,000. The rest of the participants (22.4%) earn an annual income of $40,000 to $60,000.

The majority of the participants (61% of the sample) have a post-baccalaureate degree (see Table 1). Twenty-six participants have a bachelor's degree. Twenty-two participants (25.9% of the sample) have a master's degree, and four participants have a doctorate degree. Of the remaining participants, three participants have a GED, four

participants have a high school diploma, and twenty-six participants have some college education.

Table 1
Frequency Counts and Percentages of Demographic Variables for the Study Participants (N = 85)

Variable/Classification	Frequency	%

Gender		
Female	73	25.9
Male	11	12.9
Legal Mother	1	1.2
Age of the Participant		
20 to 29	12	14.1
30 to 39	40	47.1
40 to 49	33	38.3
Income of the Participant		
Less than $10,000	3	3.5
$10,000 to $19,000	3	3.5
$19,000 to $29,000	7	8.2
$30,000 to $39,000	12	14.1
$40,000 to $49,000	9	10.6
$50,000 to $59,000	10	11.8
Greater than $60,000	41	48.2
Participant's Level of Education		
Doctorate	4	4.7
Master's	22	25.9
Bachelor's	26	30.6
Some College	26	30.6
High School	4	4.7
GED	3	3.5

The other characteristic traits of the sample include their parenting style, their level of involvement in their children's education, and their internal attachment pattern (Table 1). Baumrind (1971) derived four parenting styles: Authoritative, Authoritarian, Permissive-Neglectful, and Permissive-Indulgent. The majority of the parents in the study (60%) are found to have an authoritative parenting style, 36.5% of the participants showed that they have a permissive-indulgent parenting style (see Table 2)

Table 2

Frequency Counts and Percentages of Survey Results for the Study Participants (N = 85)

Variable/Classification	Frequency	%
Parents' Internal Attachment (RSQ)		

Dismissive	29	34.1
Fearful	9	10.6
Preoccupied	11	12.9
Secure	36	42.4
Parenting Styles (PSS)		
Permissive Indulgent	31	36.5
Permissive Neglectful	0	0
Authoritarian	3	3.5
Authoritative	51	60.0
Children's Academic Success		
Pass	85	100.0
Fail	0	0
Children's GPA's		
75	2	2.4
78	2	2.4
82.00	5	5.9
85.00	8	9.4
88.00	13	15.3
92.00	11	12.8
93.00	1	1.2
95.00	43	50.6
Parental Involvement		
20 to 29	1	1
30 to 39	15	18
40 to 49	28	33
50 to 59	26	30
60 to 69	10	12
70 to 79	5	6
Total	85	100.0

Parental Involvement: Lowest Range is High Level of Parental Involvement and High Range (70 to 79) is Low Parental Involvement

There are four subtypes of attachment, Secure, Fearful (formerly Avoidant), Preoccupied (Formerly Anxious-Ambivalent), and Dismissive. Secure attachment is the healthiest of the four patterns. (Bartholomew, Horowitz, Williamson, Walters, & Shaffer, 2002). In this current study, 42.4% of the sample showed a secure attachment pattern (see Table 2). This is consistent with several other studies showing that 40% of individuals partaking in attachment style surveys show a secure attachment pattern

(Bartholomew & Horowitz, 2002, Pederson, et al., 2014, van Rosmalen et al., 2016). Thirty-four percent report a dismissing attachment pattern, which is defined as not finding any value or significance in an adult relationship. Based on Table 2, nine participants (10.6%) show a fearful attachment pattern, where individuals have a tendency to avoid emotionally intimate relationships in order to stay safe according to their beliefs about relationships (Pederson, et al., 2014; van Rosmalen et al., 2016). Eleven participants (12.9%) show a preoccupied attachment pattern, where individuals are preoccupied thinking about "where they stand in their relationships as well as what others think about them" due to the individual's anxiety and ambivalence about emotionally intimate relationships (Pederson, et al., 2014; van Rosmalen et al., 2016). The last characteristic of the sample that I will discuss is parental involvement. The majority of the participants reported a moderate degree of parental involvement in their children's education (see Table 2). According to the participants' responses on the Parent and School Survey that measured parental involvement, it appears that one of the more challenging questions for the majority of the participants referred to attending in school board meetings; in that the majority of the participants answered that they did not partake in attending school board meetings. As discussed above, the participants' responses for each of the surveys are shown in Table 2. The descriptive statistics are shown in Table 3 and the results for each of the following research questions are shown in Table 4.

Table 3
Descriptive Statistics for the variables in the study (N=85)

	N	Minimum	Maximu m	Mean	Std. Deviation
Gender	85	1.00	3.00	1.1529	.39358
Age of the participant	85	25.00	45.00	37.4706	6.88440
in Thousands	85	9.00	65.00	50.4353	17.41541
Parenting Style Scale	85	1	3	2.24	.959
Relationship Styles	85	0	1	.42	.497
Parental Inv.	85	26.00	74.00	49.7176	11.1372

The Purpose of this Table is to Show Standard Deviations of the Study's Variables The first research question (What is the relationship between parents' internal attachment patterns and parental involvement?) consists of testing for a correlation between a categorical variable (parents' internal attachment patterns) and the mediator variable (parental involvement) which is a continuous variable. Parents' internal attachment patterns has four categories (secure, preoccupied, fearful, and dismissive); therefore, dummy variables were created for the variable, parents' internal attachment patterns. It is also important to state that Pearson's correlation cannot be used when testing for a correlation with categorical variables. Therefore, linear regression was used to determine the relationship between parents' internal

attachment patterns and parental involvement. There are five assumptions of linear regression to test in order determine if linear regression is an appropriate statistical test for a study (see Appendix H for linear regression diagnostics). All five assumptions were met and therefore linear regression was used to analyze the data in this study. The Parent and School Survey, used to measure parental involvement, was reverse scored. In other words, the Parent and School Survey was designed so that the lower total score reflected high parental involvement and a higher total score represents low parental involvement

The results indicated that there is a positive relationship between parents' internal attachment patterns (categorized as Preoccupied (pre), Fearful (f), and Dismissive (d) and parental involvement (*Bpre* = 4.394, *p*= .125; *Bf* = 11.111, *p* =.292; *Bd* =4.805, *p* = .189). These results (Table 4) also show that the relationship between parents' internal attachment patterns and parental involvement is not significant. (The secure category is not shown here because when linear regression is used with dummy variables, the reference category (secure) is omitted and the results for the other categories are always in reference to the omitted/reference category.)

Table 4

Correlation between Parents' Internal Attachment and Parental Involvement

	Unstandardized		Standardized					
Model	B	Std. Error	Beta		Sig.	Zero-order	Partial	Part
1 (Constant)	46.333	1.795		25.806	.000			
PRE	4.394	3.711	.133	1.184	.240	.035	.130	.125
Fearful	11.111	4.015	.309	2.768	.007	.240	.294	.292

Dismissive	4.805	2.688	.206	1.787	.078	.092	.195	.189
Coefficients	Coefficients			Correlations				

a. Dependent Variable: Parental Involvement

The second research question (What is the relationship between parenting styles and parental involvement?) (authoritative, (tative), authoritarian (tarian), and permissiveindulgent (ind). Linear regression was used to determine the relationship between parenting styles and parental involvement (see Appendix H for linear regression diagnostics). It was shown that the relationship between parenting styles and parental involvement is positive but not significant (*Btar* = 9.980, *p =.135*; *Bind* = .034, *p* = .989) (Table 5). (As stated in the above paragraph, the reference category for a dummy variable is omitted and the results for the other categories are in relationship to the omitted/reference category.) In this model with parenting styles as the dummy variable, authoritative has been omitted by SPSS and the other categories (authoritarian and permissive-indulgent) are in comparison to authoritative. These results show that there is a positive relationship between the methods a parent uses to rear their child and parental involvement, but the relationship is not significant.

Table 5
Correlation between Parenting Styles and Parental Involvement

	Coefficients*	
	Unstandardized	Standardized

Model	Coefficients B	Std. Error	Coefficients Beta	T	Sig.	Correlations Zero-order	Partial	Part
1(Constant)	49.353	1.556		31.708	.000			
Tarian	9.980	6.604	.166	1.511	.135	. 166	. 165	.165
IND	.034	2.531	.001	.013	.989	-.023	.001	.001

a. Dependent Variable: Parental Involvement
b. tarian= authoritarian IND = permissive-indulgent

The third research question (What is the relationship between parent's internal attachment patterns and children's academic success?) could not be addressed between parents' internal attachment patterns and children's academic success because all the participants reported that their children had succeeded. I measured children's academic success as a binary variable (Pass =1 and Fail =0) and all the scores for children's academic success were Pass=1. In order to conduct a correlation, the scores for both variables must vary. The dependent variable was converted (children's academic success) from a binary variable, being measured as Pass/Fail, to a continuous variable by using the children's GPA's for the three subjects being measured (Language Arts, Reading, and Mathematics) with numerical grades. For example, a C=75, B=85, and an A=95.

This question also uses a categorical variable (parents' internal attachment patterns which has four categories (secure, preoccupied, fearful, and dismissive). After dummy-coding the variable, parents' internal attachment patterns, linear regression (see Appendix H for linear

regression diagnostics) was used to determine the relationship between parents' internal attachment patterns, a categorical variable and children's GPA's, a continuous variable. The findings show that there is an inverse relationship between parents' internal attachment patterns and children's GPA's (*Bpre* = -.449, *p = .807; Bfear = -.833, p = .676; Bdis = -1.860, p = .166)* (Table 6). For example, when a parent has a preoccupied relationship pattern, it can be predicted that that parent's child's GPA will be lower compared to if the parent demonstrated having a secure attachment pattern.

Like-wise a parent who has a fearful attachment pattern can predict that parent's child will have a lower GPA compared to both the child of a parent who has a preoccupied attachment pattern and a parent who has a secure attachment pattern. In addition, a parent who has a dismissive attachment pattern is most likely to have a child who is at risk of not being successful in school.

Table 6

Correlation between Parents' Internal Attachment and Children's GPA's

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part

The fourth research question (What is the relationship between parenting styles and

1 Constant)	91.722	.889		103.149	.000			
PRE	-.449	1.838	-.029	-.245	.807	.024	. 027	-.027
	-.833	1.988	-.049	-.419	.676	-.003	. 047	-.046
Fearful	-1.860	1.331	-.167	-1.397	.166	-.147	-.153	-.153
Dismissive								

a. DV:GPA

children's academic success?) has similar challenges to research question 3. All eighty-five participants answered that their children were successful and gave a score of "Pass". If one of the variables has the same answer for all participants, a researcher cannot test for relationship. As in research question 3, I needed to convert the dependent variable, children's academic success, from a binary categorical variable, measured as Pass/Fail, to a continuous numerical variable by using children's GPAs. In addition, parenting styles is a categorical variable with three categories (authoritative, authoritarian, and permissive-indulgent). Since research question 4 is determining the relationship between a categorical variable (parenting styles) and a continuous variable (children's GPA's), the appropriate test for determining nature of the correlation is linear regression (see Appendix H). Parenting styles has three categories and was converted into two dummy variables (authoritarian and permissive-indulgent) with the authoritative category becoming the reference category. The results showed that there is a positive relationship

between parenting styles and children's GPA's. The findings suggest that there is a positive relationship between the authoritarian parenting style category and children's GPA's but the

relationship is statistically not significant (*Btar=2.784, p= .370)* (Table 7). The findings also showed that there is a positive relationship between the permissive-indulgent and ????(*Bind= 2.634, p= .029)* (Table 7).

Table 7

Correlation between Parenting Styles and Children's GPA's

Coefficients

	Unstandardized Coefficients		Standardized Coefficients			Correlations		
Model	B	Std. Error	Beta	T	Sig.	Zero-order ed	Partial	Part
1(Constant)	89.882	.729		123.373	.000			
tarian	2.784	3.091	.097	.901	.370	.063	.099	.096
IND	2.634	1.185	.240	2.223	.029	.226	.238	.238

a. Dependent Variable: Child's GPA

The fifth research question (What are the mediating effects of parental involvement on parents' internal attachment patterns and children's academic success?) could not be addressed using children's academic success as a categorical binary variable. In order to test for mediation, the following assumptions must be met 1) there is a correlation between parents' internal attachment patterns and parental involvement and 2) there is a correlation between parents' internal attachment patterns and children's academic success (which cannot be tested for mediation due to all of the scores for children's academic success being the same). When testing for correlations, it is important to note that the relationship between two variables can still be a correlation, the

Beta-coefficient, even when that the correlation is not significant. Statistical significance can be caused by several factors, including the sample size, effect size or the Betacoefficient (Baron & Kenny, 1986, Judd & Kenny, 1981, MacKinnon, 2008, Newsom, 2018). The first assumption is true; however, the second assumption cannot be tested due to the dependent variable, children's academic success, has only score (Pass=1) for all the participants.

To examine research question 5, I converted the dependent variable, children's academic success, from a categorical binary variable to a continuous numerical variable using children's GPA. Since parent's internal attachment patterns is a categorical variable, I recoded parents' internal attachment patterns into a dummy variable that has four categories (secure, preoccupied, fearful, and dismissive). The first assumption, a correlation between parents' internal attachment patterns and parental involvement was met (*Bpre* = 4.394, *p*= .125; *Bf* = 11.111, *p* =.292; *Bd* =4.805, *p* = .189). The second assumption, a correlation between parents' internal attachment patterns and children's GPA's was also met (*Bpre* = -.449, *p = .807; Bfear = -.833, p = .676; Bdis = -1.860, p = .166).* After dummy coding, I used multiple regression (see Appendix H) to test for mediation

It was found that parental involvement is a mediator, causing an indirect effect on the relationship between parents' internal attachment patterns and children's GPA's (*p = .037).* The categorical variable parents' internal attachment patterns has four categories (secure, preoccupied, fearful, and dismissive). The secure category was used as the reference category. The results showed that there is a positive correlation between the

preoccupied relationship pattern category and children's GPA's, but that this relationship is not significant

(B = .052, p = .977) (Table 6). The results also showed that there is a positive relationship between the fearful relationship pattern category and children's GPA's, but the relationship is not significant (*B =.435, p* = .831) (Table 6). The results indicate that there is a negative relationship between the dismissive relationship pattern category and children's GPA's, but the relationship is statistically not significant (*B = -1.312, p = .327)* (Table 6).

The reason that the relationship between the dismissive relationship pattern category and children's GPA's is that it is reverse scoring scenario, such as that the parent with a dismissive attachment pattern is less likely to have a child with a high GPA and more likely to have a child with a lower GPA than a parent who has a secure attachment pattern. When the mediator variable, parental involvement is added into the equation, it suggests that parental involvement is a mediator and that the relationship between parents' internal attachment patterns and children's GPA's has an indirect relationship (*B = -.114, p = .037)* (Table 8). The beta coefficient for parental involvement is negative because the scores on the parent and school survey for parental involvement are inversed. For example, the higher the score on the parent and school survey the less parental involvement and a low score actually shows a larger degree of parental involvement.

Table 8

Mediation Table for Model 1 (N=85)

	Unstandardized Coefficients		Standardized Coefficients			Correlations		
Model	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part
1 (Constant)	97.010	2.644		36.690	.000			
PRE	.052	1.815	.003	.029	.977	.024	.003	.003
Fearful	.435	2.037	.025	.213	.831	-.003	.024	.023
Dismissive	-1.312	1.329	-.118	-.987	.327	-.147	-.110	-.106
P I	-.114	.054	-.240	-2.118	.037	-.244	-.230	-.228

a. Dependent Variable: Child's GPA

b. PI = Parental Involvement

The sixth research question (What are the mediating effects of parental involvement on parenting styles and children's academic success?) could not be addressed for the same reasons as applied to research question five. However, after I converted the dependent variable, children's academic success, from a binary categorical variable to a numerical continuous variable, children's GPA; I was able to address research question 6 and test for mediation using multiple regression (see Appendix H). After converting children's academic success, a categorical variable with two categories (Pass and Fail) to children's GPA's, a continuous variable; I created dummy variables for the categorical variable, parenting styles.

Parenting styles has three categories: authoritative, authoritarian, and permissiveindulgent. The authoritative category became the reference variable for the authoritarian and permissive-indulgent categories. After dummy-coding the variable parenting styles, I used multiple regression to test for mediation. The variable parenting

styles has two dummy variables for each of the levels being referenced towards the authoritative category. It was found that there is a positive relationship between the authoritarian parenting style category and children's GPA's but that relationship is not significant (*B= 4.031, p= .188)* (Table 9). It was also found that there is a positive relationship between the permissive-indulgent parenting style category and children's GPA's and the relationship is significant (*B= 2.638, p= .024)* (Table 9). In addition, it was found that parental involvement is a mediator and that the relationship between parenting styles and children's GPA's is an indirect relationship and that parental involvement affects the relationship between parenting styles and children's GPA's (*B= -.125, p= .015*) (Table 9).

Table 9

Mediation Table for Model 2 (N=85)

	Unstandardized Coefficients		Standardized Coefficients			Correlations		
Model	B	Std. Error	Beta	T	Sig.	Zero-order	Partial	Part
1 (Constant)	96.048	2.572		37.336	.000			
Tarian	4.031	3.039	.141	1.327	.188	.063	.146	.138
IND	2.638	1.149	.241	2.296	.024	.226	.247	.238
P I	-.125	.050	-.262	-2.493	.015	-.244	-.267	-.259

a. Dependent Variable: Child's GPA

b. PI = Parental Involvement

The correlation between age of the participant and parental involvement is significant (r = -.031, *p*=0.05) (Table 10), indicating that older parents are more likely to be involved in their child's education than younger parents. This correlation shows a negative relationship instead of a positive relationship because of the same reason as stated earlier that the scores on the Parent and School Survey, measuring parental involvement, are reversed (low scores are better than high scores). The correlation between parents' level of education and parental involvement is significant (r = .017, p=0.05) (Table 10), meaning that parents who have a college education are more likely to be involved in their child's education than parents who have a high school diploma. The correlation between parents' level of income and parental involvement is significant (r = .246, p 0.05) (Table 10), indicating that parents with a median or higher than the median level of income are more likely to participate in their child's education than parents from a low-income background. This study's findings have found that several parental factors affect parental involvement; specifically, that the parent's age, level of education, and level of income are predictor variables to parental involvement and children's academic success.

Table 10
Correlations of Variables for Exploratory Questions (N=85)

		Zscore: age of the Participant	Zscore: Participant' s Level of thousands	Zscore: participan t	Parental Involveme nt Education
Zscore: age of the participant	Pearson Correlation	1	294**	-.031	-.260*
	Sig. (2tailed)		.006	.777	.016
	N	85	85	85	85
Zscore: in thousands	Pearson Correlation	.294**	1	-.246*	-.283**
	Sig. (2tailed)	.006		.023	.009
	N	85	85	85	85
Zscore: Parental Involveme nt	Pearson Correlation Sig. (2tailed)	-.031	-.246*	1	.017
		.777	.023		.875
	N	85	85	85	85

Zscore: Participant's Level of Education	Pearson Correlation Sig. (2tailed)	-.260*	-.283**	.017	1
			.016	.009	
				.875	
	N	85	85	85	85

Additional Analyses

I ran additional analyses in order to add more depth to the study and to determine if there are relationships between each of the categories of the variable (parents' internal attachment patterns) with each of the categories of the variable (parenting styles). Since parents' internal attachment patterns and parenting styles influence both parental involvement and children's GPA's (Children's Academic Success); I examined the relationship between parents' internal attachment patterns and parenting styles. Both parents' internal attachment patterns and parenting styles are categorical variables, the appropriate test to use to determine correlation is the Chi-Square test. Parents' internal attachment patterns have four categories/levels.

Parenting styles have three categories/levels. I ran a Chi-Square analysis determining each of the four categories (secure, preoccupied, fearful, dismissive) of parents' internal attachment patterns with the three categories (authoritative, authoritarian permissiveindulgent) of parenting styles. Chi-Square tests include the null hypothesis: Ho= Both variables are independent and the alternative hypothesis: H_1= Both variables are not independent. If the p-value is p< .05, the researcher needs to reject the null

hypothesis; if the p-value is p >.05 then the researcher needs to accept the null hypothesis.

The interpretation of a Chi-Square test is that if the results show that the variables are not independent then there is a correlation between the variables and if the variables are independent of each other, then there is no correlation between the two variables being tested with Chi-Square. In this study, Chi-Square was used to determine the relationship each of the three parenting styles categories with the four parent's internal attachment patterns categories.

The findings reveal that the majority of the 'pairs' of parenting styles and parents' internal attachment patterns are independent from each other. The permissive-indulgent (parenting style) and the preoccupied (parents' internal attachment) showed that there is a correlation between the permissive-indulgent parenting styles category and the preoccupied parents' internal attachment category (p= -.177) (Table 11). In addition, the permissive-indulgent parenting styles category and the fearful parents' internal attachment category showed that there is a correlation between the permissive-indulgent parenting styles category and the fearful parents' internal attachment category (p= .047) (Table 11).

These findings indicate that a parent who has a permissive-indulgent parenting style, where parents are more interested in being liked by their children than having rules and consequences for their children are more likely to have a fearful attachment style rather than a secure attachment style or the dismissive attachment style.

Table 11

Chi-Square Results for PSS and RSQ (N=85)

Variables	Value	Df	Significant
AU* Secure	.032	1	.858
AU* Pre	.853	1	.356
AU*Fearful	2.982	1	.084
AU*Dismissive	.079	1	.779
AUT*Secure	2.285	1	.131
AUT*Pre	1.148	1	.284
AUT*Fearful	.368	1	.544
AUT*Dismissive	1.466	1	.226
PERM-IND*Secure	.158	1	.691
PERM-IND*Pre	1.824	1	-177
PERM-IND*Fearful	3.961	1	.047
PERM-IND* Dismissive	.561	1	.454

Parenting Styles: Au= Authoritative AUT = Authoritarian PERM= Permissive-Indulgent
Parents' Internal Attachment Patterns: Secure= Secure, Pre=Preoccupied, Fearful Dismissive

Summary

The purpose of the research questions was to determine if parental involvement is a mediator and has an effect on the relationship between parents' internal attachment patterns and children's academic success (first model), and whether parental involvement has an effect on the relationship between parenting styles and children's academic success (second model). In order to test for mediation, two assumptions must be met: 1) there is a correlation between the independent variable and the dependent variable and 2) there is a correlation between the independent variable and the mediator variable.

For both models, it was necessary to convert the dependent variable, children's academic success, from a binary categorical variable to a continuous numerical variable, children's GPAs. Since my independent variables (parents' internal attachment patternsfirst model and parenting styles-second model) are categorical variables, it was necessary to create dummy variables for both parents' internal attachment patterns and for parenting styles. Parents' internal attachment patterns have four categorical levels: secure, preoccupied, fearful, and dismissive. Parenting styles have three categorical levels: authoritative, authoritarian, and permissive-indulgent. After converting children's academic success, a categorical variable to children's GPA's, a continuous variable and dummy-coding both independent variables, parents' internal attachment patterns and parenting styles, multiple regression was used to test for mediation.

The first model analysis showed that parental involvement is a mediator and creates an indirect effect on the relationship between parents' internal attachment patterns and children's GPA's. The second model analysis showed that parental involvement is a

mediator and creates an indirect effect on the relationship between parenting styles and children's GPA's.

Some of the interesting findings in this study include is the significant relationship between parental involvement and several variables measured in the study (parents' internal attachment patterns, parenting styles, age of the participant, and the parents' level of education). Other interesting findings are that there is a significant relationship between parents' internal attachment patterns and parenting styles. It is also interesting that there is no significant relationship between gender and parental involvement and no significant relationship between the age of the participant and parenting styles. One of the significant findings from my study is that several variables (parents' internal attachment patterns, parenting styles, age of the participant, and the parents' level of education (Ged, High School, Some College, BA, MA) appear to influence parental involvement.

The purpose of this study was to examine the parental factors associated with children's academic success. In chapter two, I discussed the fact that over forty years of research has shown that parental involvement is the key element for children's academic success. In this study, the findings suggest that there are several variables, including parents' internal attachment patterns, parenting styles, the level of education of the parent, and the age of the parent, that can predict parental involvement in their child's education. In chapter five, I will discuss the implications of the findings.

Chapter 5: Discussion

Introduction

The purpose of this cross-sectional quantitative study was to examine the relationship among parental involvement, parents' internal attachment patterns, parenting styles, and children's academic success. The study consisted of two mediation models to determine if parental involvement has a mediating effect on the relationship between parents' internal attachment patterns and children's academic success (first model) and whether parental involvement is a mediator and has a direct effect on the relationship between parenting styles and children's academic success (second model). One key finding in this study is that all of the children had a passing grade when children's academic success was used as a binary categorical variable.

When I converted children's academic success to a continuous numerical variable ranging from scores of 75 to 95, it showed approximately 51% of the children had GPA's of 95 and 20% of the children had scores ranging from 75 to 85. One significant finding was that parental involvement does not have a mediating effect on the relationship between parents' internal attachment patterns and children's GPAs (children's academic success). However, this study is consistent with the large body of research showing a direct effect between parental involvement and children's academic success. In addition, this study also shows that there is a direct effect between parents' internal attachment patterns and parental involvement. Parental involvement is also a mediator in both model 1 (parents' internal attachment patterns and GPA's) and model 2 (parenting styles and GPAs).

Other interesting findings showed that the parent's age, level of education, level of income, parenting styles, and parents' internal attachment patterns are five significant parental factors/traits that predict parental involvement and children's academic success. This study adds depth to the literature by determining some of the key components to parental involvement and children's academic success.

Interpretation of the Findings

As stated in chapter two, children who are not academically successful in elementary school are at greater risk of poor academic performance in high school and are at risk of dropping out of school (Zentall & Belke, 2012). The root of academic deficiencies in children aged 5-12 in the United States has many causes and warrants further investigation to understand how to increase children's academic success Chapter two also discussed how parental involvement has been shown to be the key component in children's academic success (Billman, Geddes, & Hedges, 2005; Blair, 2014; Epstein, 2001; Henderson & Mapp, 2002; Hill & Craft, 2003; Hill & Tyson, 2009; Huang & Mason, 2008; Jeynes, 2005; Overstreet, Devine, Bevins & Efreom, 2005; Sawyer, 2015). Pertaining to parental involvement, there is the challenge of defining what parental involvement entails. This study used the Parent and School Survey (Ringenberg, 2005), which incorporates the six dimensions a) parenting, b) communication, c) volunteering, d) learning at home, e) decision-making, f) collaborating with the community) that Xu, Kushner Benson, Mudrey-Camino, and Steiner (2010) define as parental involvement (refer to Chapter 2).

The findings from this study are consistent with previous research showing that parental involvement is a key predictor of parental involvement. In addition, the findings from this study also align with previous research (von Otter, 2014) in that the parents' level of education is directly linked to the degree of the parent's level of involvement in their children's education. This study's findings add important information to the literature by showing that several factors, such as parent's level of income, age of the participant, parent's level of education, parents' internal attachment patterns, and parenting styles, have a direct effect on parents' involvement.

It is possible that the link between parenting styles and parental involvement is related due to the similarities of the characteristics of the parent. For example, an individual who parents at a 'higher level' has a more positive attitude toward parenting as well as a more positive attitude toward their child's education and overall welfare. While an individual who parents at a 'lower level' has a more negative attitude toward parenting as well as a more negative attitude toward their child's education and overall welfare, that parent's child is at higher risk of not succeeding in school. In addition, parents who parent at a 'lower level' are more likely to have less education than individuals who parent at a 'higher level' and value education less than parents with a higher education (von Otter, 2014). In chapter two, I discussed the findings by Marchant, Paulson, and Rothlisberg (2001) that children's perceptions of their parents' demandingness and responsiveness (parenting styles) predicts children's academic performance.

The findings from this study show that parental involvement does mediate the relationship between parenting styles and children's academic performance (children's

GPAs), by showing that the relationship between parenting styles and children's academic performance (children's GPAs) becomes stronger when the mediating variable (parental involvement) is added to the equation between parenting styles and children's academic performance (children's GPAs) . Therefore, parenting styles has an indirect effect on children's academic performance (children's GPAs). The findings from this study also showed that parenting styles is directly affected by parents' internal attachment patterns.

In addition, the findings showed that parental involvement does mediate the relationship between parents' internal attachment patterns and children's academic performance (children's GPAs). Parents' internal attachment patterns has a direct effect on children's academic performance (children's GPAs) and parents' internal attachment patterns has a direct effect on parental involvement. The findings from this study aligns with the existing literature which has shown that parental involvement is a key predictor of children's academic performance. However, the findings also add to previous research by improving our understanding of the relationship between children's academic performance, parental involvement, parenting styles, and parents' internal attachment patterns, indicating that parents' internal attachment patterns is a key component to parental involvement and children's academic performance. The results of the study also identified five significant parental factors (parent's age, parent's level of education, parent's level of income, parenting styles, and parent's internal attachment patterns) that directly influence parental involvement.

One of the theoretical frameworks used in this study is attachment theory.

Attachment theory, (Bowlby, 1938) discusses how an individual's internal working model (infancy through adulthood) sets the stage for a sense of security or a sense of insecurity toward one's goals and challenges in life. The findings from this study show that there is a direct effect between healthy attachment and the degree of involvement a parent has in their child's education. In other words, the more emotionally-secure parent is more likely to assist participate in his or her children's education compared to the less emotionally-secure parent. Another vital finding in this study showed parenting styles is also a significant factor in predicting children's academic success.

Baumrind's (1971) parenting typologies is the second theoretical framework used in this study. Baumrind used four constructs (parental sensitivity, parental warmth, parental demandingness, and parental control) to derive the four parenting typologies (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful). The findings in this study showed that parenting styles is also an important factor in predicting parental involvement and in predicting children's academic success. The findings also show that parents' internal attachment patterns predicts parenting styles. The culmination of both theories showed that in addition to parental involvement, parents' internal attachment patterns and parenting styles are also significant factors/variables in predicting children's academic success.

Limitations of the Study

The characteristics traits of the participants described in this study appear to be aligned with similar attributes of the general population. For example, according to the

United States census (2017), the nation's median income is $71,062 and forty-eight percent of the participants in the study earn an annual income greater than $60,000. However, according to the National Center for Education Statistics (2018), nineteen percent of children live in poverty and the majority of these parents have less than a high school diploma. The findings in this study confirm the statistics from the National Center for Education that there is a direct relationship between an individual's level of education and an individual's annual income. The findings in this study also showed that the participant's income is related to the participant's parenting styles and parental involvement. Additional findings in this study showed that there is a relationship between the participant's level of education and children's GPAs (children's academic success). One significant limitation in this study is that the study does not represent the families living in poverty, whose families live in poverty and parents have a high school diploma or lower.

When we examined the demographic variable of participant's level of education, the sample in this study had a higher percentage of individuals who hold a bachelor's degree or higher. Approximately fifty-seven percent of the participants hold a bachelor's or higher degree, while the United States census (2017) report that thirty-three percent of the general population have a bachelor's or higher degree. This is a vital difference of twenty-four percent. In addition, eight percent of the sample population have a high school diploma or GED, while eighty-eight percent of the general population have a high school diploma or GED (US Census, 2017). These differences in the sample's overall level of education can play a significant role in the degree of generalizability, due to the

link between participant's level of education and parental involvement that leads to children's academic success.

The findings show that the participants' level of education effects parental involvement, children's GPAs (children's academic success), and parents' internal attachment patterns. Parental involvement, children's GPA's (children's academic success), and parents' internal attachment patterns are all significant variables used to answer several of the study's research questions. Due to the significant role that parent's level of education has in this study, combined with a sample population of higher educated participants, the findings in this study has a strong potential of being positively skewed in comparison to the general population. Therefore, one significant limitation to this study involves having higher educated participants in comparison to the general population.

Other limitations include having influential/ outliers in my data set that might skew the outcome in the analysis, the accuracy of participants' responses on the surveys and the instruments used in this study. One of the challenges for online survey research is not being able to determine who completed the survey and if a participant did not understand a particular question, he or she may not answer the question accurately. Another challenge pertaining to survey research is that a participant may not answer particular questions honestly/accurately. In addition, there was no way of knowing which grade a particular child was in school other living circumstances, such as a child attending a new school, or if there is more than one child in a particular family.

Additionally, it was not known if a parent is involved in one child's education more than another child in that family, if a particular parent is more or less involved in his or her child's education than the child's other parent, or if the family's situation had changed causing a parent to feel differently about his or her child's education. With the above stated factors and children progressing onto their next school grade, there are significant challenges in being able to replicate this study, even if the same participants were to partake in a future study.

Recommendations

First, I would recommend expanding the sample population to include participants who live in poverty as well as to expand the sample to include participants with low education. The reasons for this expansion of participants is to gain a better understanding of the broader population represented in a broader range of schools. There is still a need for further research to gain a better understanding on the characteristics of parents who participate in their children's education and parents who struggle to participate in their children's education.

The second recommendation is to conduct a study with two groups, comparing parental characteristics of parents who participate in their children's education and parents' who struggle or choose not to participate in their children's education. It is necessary to understand the characteristics of parents who struggle or choose not to partake in their children's education in order to understand how to increase parental involvement from this particular population of parents.

The third recommendation is to conduct a qualitative research study. A qualitative study will provide the opportunity to gather deeper and more detailed

information about the characteristic traits of parents and their degree of involvement. The body of literature mentioned in chapter two discusses how parental involvement is the key element in predicting children's academic success; however, there is still a need to understand the character traits of parents who partake in their children's education as well as understand the character traits of parents who struggle to partake in their children's education. The potential findings from a qualitative study examining the relationship between parental involvement, children's academic success and parental characteristic traits can provide information and data that would help school psychologists and educators to be able to screen children at risk of not succeeding in school.

Social Change Implications

One of the goals is to use the findings from this study to help educators and school psychologists design a parent-education program designed to enhance elementary school children's academic success. A second goal is to use the findings from this study to create a screening instrument that would be used to more easily identify children who are at risk of not succeeding in school. A third goal is to use the findings from the study to create an educational method/skill that would be incorporated into teaching in order to help children who are at risk of not succeeding in school become motivated to achieve high academic performance

As discussed in chapter two, research has shown that in spite that educators and psychologists know that parental involvement is the key component to children's academic success; little is known on how to increase parental involvement and thus little

is known on how to create elementary school children's academic success. This study has the potential to begin a new trend in the research of examining parental characteristics that might influence parental involvement and children's academic performance by knowing at least five parental characteristics of parents who take involvement in their child's education seriously. Further research can be drawn from the findings in this study by beginning to examine how to address parents who lack these traits. In addition, there is a need for further research based upon this study to determine how educators can integrate these parental factors into the classroom for students who do not receive these parental factors at home.

One of the parental characteristics examined in this study is parenting styles. I discussed in chapter two that Baumrind's constructs of parenting typologies, such as parental warmth, parental demandingness, and parental control, have a direct effect on children's academic self-esteem and children's academic performance (Newman, et al., 2015; Stright & Yeo, 2014). As stated earlier, this study's findings showed that parenting styles plays a significant role in children's academic performance by demonstrating that parents with an authoritative parenting style (parental warmth, parental sensitivity, and realistic expectations of their children) are more likely to be involved in their child's education than a parent who lacks parental sensitivity, parental warmth, and has a demanding or lack of expectations from their child. Educators and psychologists can use the findings from this study to create a parent-education program that focuses on educating parents about ways to increase their involvement in their children's education, increasing children's academic performance. In addition, educators

and psychologists can help teachers increase their skill level to include teaching methods in the classroom that match parental warmth and sensitivity, which have been shown to be key components in enhancing children's behavior as well as children's academic performance.

A second parental characteristic examined in this study is parents' internal attachment patterns. Parents' internal attachment patterns refers to an internal mental blueprint formed during the attachment process during their early childhood (Ainsworth & Bowlby, 1991; Bretherton, 1992; Pederson, et al.., 2014, van Rosmalen, et al., 2016).

The findings from this study have showed that parents' internal attachment patterns have a direct effect on parental involvement and parents' internal attachment patterns have a direct effect on children's academic performance. Educators and psychologists can use the findings and information on parents' internal attachment patterns to create the parenteducation program mentioned in the above paragraph. In addition, educators and psychologists can use the findings about the effect that parents' internal attachment patterns have on parental involvement to create communication techniques for teachers to use with parents in order to increase parental involvement. For example, it is natural for individuals to be willing to communicate in empathetic manners when there is a better understanding of knowing how a teacher should communicate to a particular parent. Another important social impact that the findings can have is that educators, school social workers, and psychologists can use the findings to create screening instruments to be able to determine children at risk of not succeeding in school. When there is early detection of challenges for children to succeed, it provides the opportunity to the professionals

working with these children to provide tools to children to overcome their challenges and to succeed in school. When more children succeed in school, there is a direct link to more positive communities, with less crime, more productive citizens, and a smaller number of individuals living on welfare (Duncan et al., 2007; Lee, McInerney, Liem, & Ortiga, 2010; U.S. Bureau of Labor Statistics, 2010). In addition to identifying children who are at risk of not succeeding in school is being able to understand the parents of these children as well as understanding the parents' characteristics and their views and challenges in partaking in their children's education. When psychologists, school social workers, and educators have a better understanding of the children as well as of the parents, they can use this knowledge to address the parent's challenges for being involved in their children's education. For example, educators may gain significant knowledge to utilize in their communication with parents in order to motivate the parents to increase their participation in their children's education. Another significant component to having insight to parents and their role in their children's education is that educators will have a better understanding of that child's challenges at home that might affect a child's academic performance. When educators have a better understanding on how to more effectively work with and educate a particular child, it can lead to that child's academic success.

The two theoretical frameworks used in this study are Baumrind's parenting typologies and Bowlby's attachment theory. This study aligns with these theoretical frameworks in that parents' internal attachment patterns and parenting styles are significant predictor variables for parental involvement and children's academic success.

A significant implication derived from this study is that there is a direct link between parents' internal attachment patterns and parental involvement; therefore, we can predict parental involvement based on a parent's internal attachment patterns. A second theoretical implication is that parenting styles affects children's academic performance.

Conclusion

This study makes a significant contribution to the large body of research examining the relationship between parental involvement and children's academic success. Previous to this study, we had very little information on the characteristics of parents who partake in their children's education and there was no information on how parents' internal attachment patterns or parenting styles affect parental involvement or how these two parental factors affect children's academic success. This is the first study to examine the relationship among parents' internal attachment patterns, parenting styles, parental involvement, and children's academic success.

The findings from this study have shown that parents' internal attachment patterns and parenting styles play significant roles in predicting parental involvement and children's academic success. This study has shown five key parental factors (parent's age, level of income, level of education, parenting styles, and the parent's internal attachment patterns) and therefore, has shown the potential to 1) understand more detailed information on the characteristics of parents who partake in their children's education and parents who struggle to partake in their children's education, 2) to increase parental involvement in children's education, and 3) increase children's academic success, which has shown to have positive life-long effects for individuals and communities (Duncan et al., 2007; Lee, McInerney, Liem, & Ortiga, 2010; U.S. Bureau

of Labor Statistics, 2010). In order to change society for the better, we must start by increasing children's academic performance.

References

Abras, L.S., & Gibbs, J. T. (2002). Disrupting the logic of home-school relations: Parent involvement strategies and practices of inclusion and exclusion. *Urban Education, 37*(3), 384-407. EJ660359

Ainsworth, M. & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist 46*(4). 333-341. 0003-066x/91. Accession Number: edsgcl.10746346

Alivernini, F., & Lucidi, F. (2011). Relationship between social context, self-efficacy, motivation, academic achievement, and intention to drop out of high school: A longitudina study. *Journal of Educational Research*, *104*(4), 241-252. doi:10.1080/00220671003728062

Baker, C.E. & Rimm-Kaufman, S. (2014). How homes influence schools: Early parenting predicts African-American children's classroom social-emotional functioning. *Psychology in the Schools 51*(7) 722-735. doi:10.1002/pits.21781

Banerjee, M., Harrell, Z. T., & Johnson, D. J. (2011). Racial/Ethnic socialization and parental involvement in education as predictors of cognitive ability and achievement in African-American children. *Journal of Youth and Adolescence*, *40*(5), 595-605. doi:10.1007/s10964-010-9559-9

Baron, R.M. & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical consideration.

Journal of Personality and Social Psychology.

51(6). 1173-1182. http://dx.doi.org/10.1037/0022-3514.51.6.1173

Bartholomew, K., Horowitz, L. M., Williamson, G. M., Walters, A. S., & Shaffer, D. R. (2002).Relationship Scales Questionnaire. *Health Psychology, 21* 405-410. HaPI-247611

Baumrnd, D. (1971). Current patterns of parental authority. *Developmental Psychology 4*(1) 1-103. doi:10.1037/h0030372

Baumrind, D. (2012). Differentiating between confrontational and coercive kinds of parental power-assertive and disciplinary practices. *Human Development 55*(2). 35 -51. doi:10.1159/000337962

Beaver, K. & Belsky, J. (2012). Gene-Environment interaction and the intergenerational transmission of parenting: Testing the differential-susceptibility hypothesis. *Psychiatric Quarterly 83*(1), 29-40. doi:10.1007/s11126-011-9180-4.

Bellei, C. (2013). Supporting instructional improvement in low-performing schools to increase students' academic achievement. *Journal of Educational Research 106(*3). 235-248. http://dx.doi.org/10.1080/00220671.2012.687788

Bergin, C. & Bergin, D. (2009). Attachment in the classroom. *Educational Psychology Review 21*(2), 141-170. doi:10.1007/s10648-009-9104-0

Billman N, Geddes C, & Hedges H (2005) Teacher–parent partnerships: Sharing understandings and making changes. *Australian Journal of Early Childhood 30*(1): 44–48. http://dx.doi.org/10.1080/00220671.2012.687788

Blair, S. (2014). Parental involvement and children's educational performance: A comparison of Filipino and U.S. Parents. *Journal of Comparative Family Studies,*

XLV (3), Summer 2014. http://www.jstor.org/stable/24339542

Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry 52(*4), 664-678. doi:10.1111/j.1939-0025.1982.tb01456.x

Bretherton, I. (1992). Origins of attachment theory. *Developmental Psychology 28(*6) 759-775. doi:10.1080/00121649/92.

Brown, A. (2017). A step-by-step guide to non-linear regression analysis of experimental data using a Microsoft excel spreadsheet. *Computer Methods and Programs in Biomedicine* https://www.researchgate.net-publication:11997179. doi: 10.1016/SO169-2607(00)00124-3

Brown, G.L., Mangelsdorf, S.C., & Neff, C. (2012). Father involvement, paternal sensitivity,and father-child attachment security in the first three years. *Journal of Family Psychology, 26* (3), 421-430. doi:10.1037/a0027836

Brumariu, L. (2015). Parent-child attachment and emotion regulation. *New Directions for Child and Adolescent Development 148,* 31-45. doi:10.1002/cad.20098

Calarco, J.M. (2011). "I need help!" Social class and children's help-seeking in elementary school. *American Sociological Review 76(*6), 862-882. doi:10.1177/0003122411427177.

Cauce, A.M. (2008). Parenting, culture, and context: Reflections on excavating culture. *Applied Developmental Science 12(*4), 227-229 doi:10.1080/10888690802388177.

Ceballo, R.r., Maurizi, L.K., Suarez, G.A., & Aretakis, M.T. (2014). Gift and scacrifice: Parental involvement in Latino adolescents' education. *Cultural Diversity & Ethnic Minority Psychology, 20*(1), 116-127. doi:10.1037/a0033472

Chen, P.P., Cleary, T. J., & Lui, A.M. (2015). Examining parents' ratings of middle-school students' academic self-regulation using principal axis factor analysis. *School Psychology Quarterly 30(*3), 385-397. doi:10.1037/spq0000098.

Chui, W.Y. & Leung, M-T (2016). Adult attachment internal working model of self and other in Chinese culture: Measured by the attachment style questionnaire – short form (ASQ-SF) by confirmatory factor analysis (CFA) and item response theory (IRT). *Personality and Individual Differences 96* 55-64. doi:10.1016/J.PAID.

Comber, B, (2014). Literacy, poverty, and schooling: What matters in young people's education? *Literacy 48(3)*, 115-123. doi:10:1111/lit.12041.

Cook, B.G., Sheperd, K.G., Cook, S.C., & Cook, L. (2012). Facilitating the effective implementation of evidence-based practices through teacher-parent collaboration. *Teaching Exceptional Children 44(*3), 22-30. Accession Number: 69989327 Cote, S., Bouffard, T., & Vezeau, C. (2014). The mediating effect of self-evaluation bias of competence on the relationship between parental emotional support and children's academic functioning. *British Journal of Educational Psychology, 84,* 415-434. doi:10.1111/bjep.12045

Cowan, P., Pape-Cowan, C., & Mehta, N. (2009). Adult attachment, couple attachment, and children's adaptation to school: an integrated attachment template and family risk model. *Attachment & Human Development 11*(1), 29-46. doi:10.1080/1461673080

Cripps, K., & Zyromski, B. (2009). Adolescents Psychological Well-Being and Perceived

Parental Involvement: Implications for Parental Involvement in Middle Schools. Research in Middle Level Education Online, 33(4), 1-13. doi:10.1080/19404476.2009.

Crozier, G., & Davies, J. (2007). Hard to reach parents or hard to reach schools? A discussion of home-school relations, with particular reference to Bangladeshi and Pakistani parents. *British Educational Research Journal 33(*3), 295-313. doi:10.1080/014119201243578

Degotardi, S., Sweller, N., & Pearson, E. (2013). Why relationships matter: Parent and early childhood teacher perspectives about the provisions afforded by young children's relationships. *International Journal of Early Years Education, 21*(1), 4-21. doi:10.1080/09669760.2013.771325.

Diener, M., Isabella, R., & Behunin, M. (2007). Attachment to mothers and fathers during middle childhood: Associations with child gender, grade, and competence. *Social Development, 7*(1). doi:10.1111/j.1467.9507.2007.00416.

Dopkins Stright, A., & Kim Lian, Y. (2014). Maternal Parenting Styles, School Involvement, and Children's School Achievement and Conduct in Singapore *Journal of Educational Psychology*, *106*(1), 301-314. doi:10.1037/a0033821

Dor, A., & Rucker-Naidu, T.B. (2012). Teachers' attitudes toward parents' involvement in school: Comparing teachers in the USA and Israel. *Issues in Educational Research 22(*3), 246-262. EJ997341

Drake, K., Belsky, J., & Pasco Fearon, RM. (2014). From early attachment to engagement with learning in school: The role of self-regulation and persistence.

Developmental Psychology, 50(5), 1350-1361. doi:10.1037/a.0032779.

Duchesne, S., Vitaro, F., Larose, S., & Tremblay, R. (2008). Trajectories of anxiety during elementary-school years and prediction of high school noncompletion. *Journal of Youth and Adolescence*, 37, 1134-1146. doi:10.1007/s10964-007-9224-0

Duchesne, S., & Ratelle, C. (2010). Parental Behaviors and Adolescents' Achievement Goals at the Beginning of Middle School: Emotional Problems as Potential Mediators. *Journal of Educational Psychology, 102(2),* 497-507. http://dx.doi.org/10.1037/a0019320

Duncan, G., Dowsett, C.J., Claessens, A., Magnuson, K., Huston, A.C., Klebanov, P. Japel, C. (2007). School readiness and later achievement. *Developmental Psychology, 43*(6). 1428-1446. doi:10.1037/0012-1649.43.6.1428

Dwairy, M., & Achoui, M. (2010). Parental control: A second cross-cultural research on parenting and psychological adjustment of children. *Journal of Child and Family Studies 19*(1), 16-22. doi:10.1007/s10826-009-9334-2.

Enlund, E., Aunola, K., & Nurmi, J. (2015). Stability in parents' causal attributions for their children's academic performance: A nine-year follow-up. *Journal of Developmental Psychology. 61(4).* 509-536. Accession Number**:** edspmu.S1535026615400045

Epstein, J. (2001). School, family and community partnerships: Preparing educators and improving schools. Boulder, CO: Westview.

Ferguson, E.D., Hagaman, J., Maurer, S., Mathews, P., & Peng, K. (2013). Asian culture in transition: Is it related to reported parenting styles and transitivity of simple

choices? *Journal of Applied Social Psychology 43(*4), 730-740. doi:10.1111/jasp.12001.

Fiori, K., Consedine, N., & Magai, C. (2009). Late life attachment in context: Patterns of relating among men and women from seven ethnic groups. *Journal of Cross-Cultural Gerontology 24* (2) 121-141. doi:10.1007/s 10823-008-9078-2

Flores de Apodaca, R., Gentling, D. G., Steinhaus, J. K., & Rosenberg, E. A. (2015). Parental involvement as a mediator of academic performance among special education middle school students. *School Community Journal, 25*(2), 35-54 EJ1085649

Frankel, K.A., & Bates, J.E. (1990). Mother-Toddler problem solving: Antecedents in attachment, home behavior, and temperament. *Child Development 61*(3) 810-819. doi:10.1111/J.1467-8624.1990

Friedman, S., Bender, R., Spieker, S., Keating, D., Scholnick, E., Vandergrift, N., . . . Park, Y. (2014). Planning in middle childhood: Early predictors and later outcomes. *Child Development, 85*(4), 1446-1460. doi:10.1111/cdev.12221

Gafoor, K. A., & Kurukkan, A. (2014). Goal Orientation among Boys and Girls in Higher Secondary Schools of Kerala: How Parenting Styles Influence It? *Online Submission*.

Giammopulu, I., Escolano, S., Cusin, F., Citeau, H., & Dellatolas, G. (2008). Teachers' reporting of behavioral problems and cognitive-academic performances. *British Journal of Educational Psychology 78(1).* 127-147. doi:10.1348/000709907X204372

Glazzard, J. (2014). Paying the price for being inclusive: The story of Marshlands.

Support for Learning 29(1). 24-38. doi:10.1111/1467-9604.12043

Gonzalez-DeHass, A. R., Willems, P. P., & Holbein, M. D. (2005). Examining the relationship between parental involvement and Student Motivation. *Educational Pychology Review, 17*(2), 99-123. doi:10.1111/1467-9604.12043

Green, C., Walker, J., Hoover-Dempsey, K., & Sandler, H. (2012). Parents' motivations for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology, 99*(3), 532-544. doi:10.1037/0022-0663.99

Grolnick, W. (2015). Mothers' motivation for involvement in their children's **s**chooling: mechanisms and outcomes. *Motivation & Emotions 39*(1). 63-73. doi:10.1007/s11031-014-9423-4

Gut, J., Reimann, G., & Grob, A. (2013). A contextualized view on long-term predictors of academic performance. *Journal of Educational Psychology 105*(2), 436-443. doi:10.1037/a0031503.

Hazen, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511–524. http://dx.doi.org/10.1037/0022-514.52.3.511

Heather, L. & Mahoney, J. (2007). Neighborhood crime and self-care: Risks for aggression and lower academic performance. *Developmental Psychology 43*(6). 1321-1333. 0012-1649 http://dx.doi.org/10.1037/0012-1649.43.6.1321

Henderson, A.T., & Mapp, K. L., (2002). A new wave of evidence. The impact of school, family, and community connections on student achievement. *National Center for Family and Community Connections with Schools.* ED474521

Hill, N. E., & Craft, S. A. (2003). Parent-school involvement and school performance: Mediated pathways among socioeconomically comparable African American and Euro-American families. *Journal of Educational Psychology, 95*(1), 74-83. doi:10.1037/0022.0663.95.

Hill, N., & Tyson, D. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology 45*(3), 740-763. doi:10.1037/a0015362.

Hornby, G. & Lafaele, R. (2011). Barriers to parental involvement in education: An explanatory model. *Educational Review 63*(1), 37-52. doi:10.1080/00131911. Huang, G. H., & Mason, K. L. (2008). Motivations of Parental Involvement in Children's Learning: Voices from Urban African American Families of Preschoolers. *Multicultural Education, 15*(3), 20-27. Accession Number: edsgcl.180030023

Irizarry, J. (2009). Cultural deficit model. Education. com

Jackson, B. & Hilliard, A. (2013). Too many boys are failing in American schools: What can we do about it? *Contemporary Issues in Education Research 6(*3). 311-316. EJ1073203.

Jeon, S., & Neppl, T. K. (2016). Intergenerational continuity in economic hardship, parental positivity, and positive parenting: The association with child behavior. *Journal of Family Psychology, 30*(1), 22-32. doi:10.1037/fam0000151

Jeynes, W.H. (2015). A meta-analysis: The relationship between father involvement and student academic achievement. *Urban Education 50*(4), 387-423. doi:10.1177/00420891425789.

Johnson, S. M., Reinborn, S., Charner-Laird, M., Kraft, M., Ng, M., & Papay, J.P.

(2014). Ready to lead, but how? Teachers' experiences in high-poverty urban schools.

Teachers College Record 116 (10), 1-50. PMC4391200

Jones, S.M., Bub, K. L., & Raver, C.C. (2013). Unpacking the black box of the Chicago school readiness project intervention: The mediating roles of teacher-child relationship quality

Jones-Mason, K., Elaine Allen, I., Hamilton, S., & Weiss, S. J. (2015). Comparative validity of the Adult Attachment Interview and the Adult Attachment Projective. *Attachment & Human Development, 17*(5), 429-447. doi:10.1080.14616734

Judd, C.M. & Kenny, D.A. (1981). Process Analysis: Estimating mediation in treatment evaluations. *Evaluation Review, 5(5),* 602-619. http://dx.doi.org/10.1177/0193841x

Kaplan-Toren, N. (2013). Multiple dimensions of parental involvement and its links to young adolescent self-evaluation and academic achievement. *Psychology in the Schools 50(6)*. 634-649. EJ1014461

Kawai, R., Serrierre, S. & Mitra, D. (2014). Contested spaces of a "failing" elementary school. *Theory and Research in Social Education 42(*4). 486-515. doi:10.1080/00933104.

Kerns, K., Tomich, P., Aspelmeier, J., & Contreras, J. (2000). Attachment-based assessments of parent–child relationships in middle childhood. *Developmental Psychology, 36*(5), 614–626. doi:10.1037/0012-1649.36.5.614.

Khodayarifard, M., Brinthaupt, T. M., & Anshel, M. H. (2010). Relationships of parents' and child's general attributional styles to academic performance. *Social Psychology*

of Education, *13*(3), 351-365. doi:10.1007/s11218-010-9114-2

Kim (2015). Statistical Consulting Associate, University of Virginia ststlab@virginia.edu

Kim, S.W., & Hill, N. (2015). Including fathers in the picture: A meta-analysis of parental involvement and students' academic achievement. *Journal of Educational Psychology 17*(4). 919-934. EJ1082651

Kim, H., & Page, T. (2013). Emotional bonds with parents, emotion regulation, and school-related behavior problems among elementary school truants. *Journal of Child & Family Studies, 22*(6), *869-878.* doi*:*10.1007/s10826-012-9646-5

Kim, Y. (2009). Minority parental involvement and school barriers: Moving the focus away from deficiencies of parents. *Educational Research Review*, *4*(2), 80-102. https://doi.org/10.1016/j.edurev.2009.02.003

Kitamura, T., Shikai, N., Uji, M., Hiramura, H., Tanaka, N., & Shono, M. (2009). Intergenerational transmission of parenting style and personality: Direct influence or mediation? *Journal of Child & Family Studies 18(*5), 541-556. doi:10.1007/s10826-009-9256-z

Kraft, M.A., & Rogers, T. (2014). Teacher to parent communication: Experimental evidence from a low-cost communication policy. *Society for Research on Educational Effectiveness* ED563011

Kyle, D.W. (2011). Families' goals, school involvement, and children's academic achievement: A follow-up study thirteen years later. *School Community Journal*

21(2). 9-24. EJ957125

LaRocque, M., Kleiman, I., & Darling, S.M. (2011). Parental involvement: The missing link in school achievement. *Preventing School Failure 55(*3). 115-122. doi:10.1080/10459880903472876.

Lee, J.Q., McInerney, D., Liem, G.A.D., & Ortiga, Y. (2010). The relationship between future goals and achievement goal orientations: An intrinsic-extrinsic motivation perspective. *Contemporary Educational Psychology 35(*4). 264-279. doi:10.1016/j.cedpsych.2010.04.004

Lee, K. S., & Kim, S. H. (2012). Socioeconomic background, maternal parenting style, and the language ability of five- and six-year old children. *Social Behavior and Personality, 40* (5), 767-782. doi:10.2224/sbp.2012.40.5.767

Li, Wong, Lamoureux, Wong (2012). Are linear regression techniques appropriate for analysis when the dependent (outcome) variable is not normally distributed? *Invest Ophthamol Vis Sci* 2012 May 1;53(6):3082-3 doi: 10.1167/iovs.12-9667

MacKinnon, D.P. (2008). *Introduction to statistical mediation analysis.* Mahwah, NJ: Erlbaum.ISBN-13:978-0-8058-6429-8

Mac Tan, M.S. Applied Statistics, New York University (2019)

Main, M., George, C., & Kaplan, N. (1985). Adult attachment interview. Growing points of attachment theory. *Monographs of the Society for Research in Child Development. 50*(1-2), 66-104. doi:10.2307/3333827

Marchant, G. J., Paulson, S. E., & Rothlisberg, B. A. (2001). Relations of middle school students' perceptions of family and school contexts with academic achievement. *Psychology In The Schools, 38(6),* 505-519. doi:10.1002/pits.1039.abs

McLachlan, B. & Davis, G. (2013). Educating the educators: Developing those who support learning for students with additional learning needs. *Support for Learning 28(*4), 173-180 doi:10.1111/1467-9604.12035

McNal, R. J. (2014). Parent involvement, academic achievement and the role of student attitudes and behaviors as mediators. *Universal Journal of Educational Research, 2(8),* 564-576. doi:10.13189/ujer.2014.020805

Mesman, J., van Ijzendoom, M., Behrens, K., Carbonell, O.A., Carcamo, R., Cohen-Paraira, I.,Yavuz, M., (2016). Is the ideal mother a sensitive mother? Beliefs about early childhood parenting in mothers across the globe. *International Journal of Behavioral Development 40*(5), 385-397. doi:10.1177/0165025415594030

Milam, A. J., Furr-Holden, C. D. M., & Leaf, P. J. (2010). Perceived school and neighborhood safety, neighborhood violence and academic achievement in urban school children. *The Urban Review*, *42*(5), 458-467. doi:10.1007/s11256-010-0165-7

Miljkovitch, R. & Danet, M. (2012). Intergenerational transmission of attachmentrepresentation in the context of single parenthood in France. *Journal of Family Psychology 26(*5) 784-792. doi:10.1037/a0029627

Mircki, R. & Chou, J. (2013). A multicultural application of attachment theory with immigrant families: Contextual and developmental adaptations. *Contemporary Family Therapy: An International Journal 35(*3), 508-515. doi:1007/s10591-012-9210-x

Montgomery, D.C., Peck, E.A. & Vining, G.G. (2012). Introduction to linear regression analysis. Vol. 821, John Wiley & Sons, Hoboken, NJ.

Morrison (2009). Parenting and academic development. *Merrill-Palmer Quarterly, 55(3)*

361-372. doi;10.1353/mpq.0.0028

Moss, E., & St-Laurent, D. (2001). Attachment at school age and academic performance. *Developmental Psychology, 37*(6), 863–874. doi:10.1037/0012-1649.37.6.86

Mothander, P.R., & Wang, M. (2014). Parental rearing, attachment, and social anxiety in Chinese adolescents. *Youth & Society, 46*(2) 155-175. Accession Number: edsgcl.373441117

Murry, V.M., Berkel, C., Brody, G.H., Miller, S.J., & Chen, Y. (2009). Linking parental socalization to interpersonal protective processes, academic self-presentation, and expctations among rural African American youth. *Cultural Diversity and Ethnic Miority Psychology 15(*1), 1-10. doi:10.1037/a0013180.

National Center for Education Statistics (2018). Retrieve from https://nces.ed.gov

Newman, J., Hamide, G., Shuyi, G., Ji Eun, L., Xian, L., & Yuriko, S. (2015). Relationship between Maternal Parenting Style and High School Achievement and Self-Esteem in China, Turkey and U.S.A. *Journal of Comparative Family Studies, 46(2),* 265-288. http://www.jstor.org/stable/43613115

Newsom (2018). Testing Mediation with Regression Analysis. *Structural Equation Modeling,* Spring, 2018. ISBN: 146252334x

Niht, S., & Gurbuzturk, O. (2013). Primary school students' parents' level of involvement into their children's education. *Educational Sciences, Theory and Practice 13*(2), 1006-1011. EJ1017261

Ngyen, P. (2008). Perceptions of Vietnamese fathers' acculturation levels, parenting styles, and mental health outcomes in Vietnamese American adolescent immigrants.

*Social Work 53(*4), 337-346. doi:10.1093/SW/53.4

O'Neill, L., Guenette, F., & Kitchenham, A. (2010). "Am I safe here and do you like me?" Understanding complex trauma and attachment disruption in the classroom. *British Journal of Special Education 37(*4), 190-197. doi:10.1111/j.1467-8578

Overstreet, S., Devine, J., Bevans, K., & Efreom, Y. (2005). Predicting parental involvement in children's schooling within an economically disadvantaged African American sample. *Psychology in the Schools*, *43*, 101-111. doi:10.1002/pits.20028

Pagani, L.S., Fitzpatrick, C., Archambault, I., & Janosz, M. (2010). School readiness and later achievement: A French Canadian replication and extension. *Developmental Psychology, 46*(5), 984-994. doi:10.1037/a0018881

Pederson, D.R., Bailey, H.N., Tarabulsy, G.M., Bento, S., & Moran, G. (2014). Understanding sensitivity: Lessons learned from legacy of Mary Ainsworh. *Attachment & Human Development 16*(3) 261-270. doi:10.1080/14616734.2014

Perera, L.H. (2014). Parents' attitudes towards science and their children's science achievement. *International Journal of Science Education, 36(*18), 3021-3041. doi:10.1080/09500693

Pew Research Center (2015). Retrieved from www.pewresearch.org

Porcerelli, J., Huth-Bocks, A., Huprich, S., & Richardson, L. (2016). Defense mechanisms of pregnant mothers predict attachment security, social-emotional competence, and behavior problems in their toddlers. *The American Journal of Psychiatry 173(*2), 138-146. https://doi-org.ezp.waldenulibrary.org/10.1176/appi.ajp.2015.15020173

Quilliams, L., & Beran, T. (2009). Children at Risk for Academic Failure: A Model of Individual and Family Factors. *Exceptionality Education International, 19*(2-3), 63-76. EJ871204

Ramano, E., Babchishin, L., Marquis, R., & Frechette, S. (2015). Childhood maltreatment and educational outcomes. *Violence and Abuse, 16*(4), 418-437. doi:10.1177/1524838014537

Ratner, K. (2013). The Role of Parenting and Attachment in Identity Style Development. *University Of Central Florida Undergraduate Research Journal, 7*(1), 15-26. http://stars.library.ucf.edu/honorstheses1990-2015/1454

Renshaw, T., Eklund, K., Dowdy, E., Jimerson, S., Hart, S., Earhart, J., & Jones, C. (2009). Examining the relationship between scores on the behavioral and emotional screening system and student academic, behavioral, and engagement outcomes: An investigation of concurrent validity in elementary school. *The California School Psychologist 14* 81-88. EJ878363

Reyes, M.R., Bracket, M.A., Rivers, S.E., White, M. & Salovey, P. (2012). Classroom, emotional climate, student engagement, and academic achievement. Journal of Educational Psychology,104(3), 700-712. doi:10.1037/a0027268

Ringenberg, M., Funk, V., Mullen, K., Wilford, A., & Kramer, J. (2005). Test-Retest reliability of the parent and school survey (PASS). *School Community Journal 15*(2), 121-134. http://www.adi.org/journal/fw05/RingenbergFunkMullenWilfordKramerFall2005.pdf

Russo, C.J. (2005). Conflicts over directing the education of children: Who controls, parents or school officials? *Journal of Education 186*(2). 27-40. EJ764583.

Rytkönen, K., Aunola, K., & Nurmi, J. (2005). Parents' causal attributions concerning their children's school achievement: A longitudinal study. *Merrill-Palmer Quarterly, 51*(4), 494-522. doi:10.1353/mpq.2005.0027

SAS. UCLA: Statistical Consulting Group. (2016). Introduction to SAS.UCLA: Statistical Consulting Group. https://stats.idre.ucla.edu/sas/modules/sas-learningmodule

Saunders, J., Hume, C., Timperio, A., & Salmon, J. (2012). Cross-sectional and longitudinal associations between parenting style and adolescent girls' physical activity. *International Journal of Behavioral Nutrition and Physical Activity, 9*(1), 141. doi:10.1186/1479-5868

Sawyer, M. (2015). Bridges: Connecting with families to facilitate and enhance involvement. *Teaching Exceptional Children, 47*(3), 172-179. doi:10.1177/0040059914558946.

Schwebel, M. (2012). Why America doesn't fix its failing schools? *Journal of Peace Psychology 18(*2), 193-198. doi:10.1037/a0028295.

Seden, J. (2008). Creative connections: Parenting capacity, reading with children and practitioner assessment and intervention. *Child & Family Social Work, 13(2),* 133-143. doi:10.1111/j.1365-2206.2007.00526.x

Sette, G., Coppola, G., & Cassibba, R. (2015). The transmission of attachment across generations: The state of art and new theoretical perspectives. *Scandinavian Journal of Psychology 56(*3), 315-326. doi:10.1111/SJOP. 12212

Shirvani, H. (2007). Effects of teacher communication on parents' attitudes and their children's behaviors at schools. *Education 128(*1) 34-47. EJ790150.

Sime, D. & Sheridan, M. (2014). "You want the best for your kids": Improving educational outcomes for children living in poverty through parental engagement. *Educational Research 56(*3), 327-342. doi:10.1080/00131881.

Smith, C. A., Krohn, M. D., Chu, R., & Best, O. (2005). African American fathers myths and realities about their involvement with their firstborn children. *Journal of Family Issues*, *26*(7), 975-1001. doi:10.1177/0192513X05275421

Spilt, J.L., Hughes, J.N., Wu, J.Y., & Kwok, O.M. (2012). Dynamics of teacher-student relationships: Stability and change across elementary school and the influence on children's academic success. *Child Development 83(4)*. 1180-1195. doi**:**10.1111/j.1467-8624.2012.01761.x

Sroufe, L.A (2005). Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment & Human Development 7(*4), 349-367. doi:10.1080/14616730500366928.

Steinberg, A., & Almeida, C.A. (2010). Expanding the pathway to postsecondary success: How recuperative back-on-track schools are making a difference. *New Directions for Youth Development 2010(*127), 87-100. doi:10.1002/yd.365

Steinmayer, R., Dinger, F., & Spinath, B. (2010). Parents' education and children's achievement: The role of personality. *European Journal of Personality 24(*6), 535-550. doi:10.1002/per.755

Stight, A. D., & Yeo, K. L. (2014). Maternal parenting styles, school involvement, and children's school achievement and conduct in Singapore. *Journal of Educational*

Psychology, 106(1), 301-314. doi:10.1037/a0033821

Swanson, J., Valiente, C., & Lemery-Chafaant, K. (2012). Predicting academic achievement from cumulative home risk: Mediating roles of effortful control, academic relationships and social avoidance. *Merrill-Palmer Quarterly*, *58*(3), 375-408. doi:10.1353/MPQ

Su, Y., Doerr, H. S., Johnson, W., Shi, J., & Spinath, F. M. (2015). The role of parental control in predicting school achievement independent of intelligence. *Learning and Individual Differences,* 203-209. doi:10.1016/J.LINDIT.

Tamis-LeMonda, C. S., & Baumwell, L. (2011). Parental sensitivity in early development: Definition, methods, measurement, and generalizability. In *Maternal Sensitivity: A Scientific Foundation for Practice* (pp. 1-16). Nova Science Publishers, ISBN: 9781611227284

Thijs, J. & Eilbracht, L. (2012). Teachers' perceptions of parent-teacher alliance and student-teacher relational conflict: Examining the role of ethnic differences and disruptive" behavior. *Psychology in the Schools 49(*8). doi:10.1002/pits

Thomas, P.L. (2010). The Payne of addressing race and poverty in public education: Utopian accountability and deficit assumptions of middle-class America. *Souls: A Critical Journal of Black Politics, Culture & Society 12(*3), 262-283. doi:10.1080/10999949.

Trentacosta, C., Hyde, L., Shaw, D., Dishion, T., Gardner, F., & Wilson, M. (2008). The relations among cumulative risk, parenting, and behavior problems during early childhood. *Journal of Child Psychology and Psychiatry, 49(11),* 1211-1219.

doi:10.1111/s.1469-7610.2008.01941.

Uji, M., Sakamoto, A., Adachi, K., & Kitamura, T. (2014). The impact of authoritative, authoritarian, and permissive parenting styles on children's later mental health in Japan: Focusing on parent and child gender. *Journal of Child and Family Studies 23(2)*. 293-302 doi:10.1007/s10826-013-9740-3

United States Bureau of Labor Statistics. (2010). Tabulations. Retrieved May 11, 2010 from Retrieved from http://ftp.bls.gov/pub/special.requests/If/aat7.txt United States Census Bureau (2017-2018). Retrieved from https://www.census.gov

United States Department of Health and Human Services (2013). Repeating a Grade. Retrieved from http://datacenter.kidscount.org/data/tables/5110

Verhage, M., Schuengel, C., Madigan, S., Fearon, R., Oosterman, R., Bakermans Kranenburg,M., .Uzendoorn, M. (2016). Narrowing the transmission gap: A synthesis of three decades of research on intergenerational transmission of attachment. *Psychological Bulletin 142*(4), 337-366. doi:10.1037/bul0000038.

von Otter, C. (2014). Family Resources and Mid-Life Level of Education: A Longitudinal Study of the Mediating Influence of Childhood Parental Involvement. *British Educational Research Journal, 40*(3), 555-574. doi:10.1002/berj.3111 van Rosmalen, L., van der Horst, F., & van der Veer, R. (2016). From secure dependency to attachment. *History of Psychology 19(*1), 22-39. doi:10.1037/hop0000015

Walker, J. M.T., Shenker, S., & Hoover-Dempsey, K.V. (2010). Why do parents become involved in their children's education? *Professional School Counseling 14(1)* 27-41. https://doi.org/10.5330/prsc.14.1.768th8v77571hm7r

Walters-Parker, K. (2009). Communication with parents to enhance learning. *Education.*

com, 1-10.

Wang, M.T., Hill, N., & Hofkens, T. (2014). Parental involvement and African American and European American adolescents' academic, behavioral, and emotional development in secondary school. *Child Development 85(*6), 2151-2168. doi:10.1111/cdev.12284.

Watabe, A., & Hibbard, D. R. (2014). The influence of authoritarian and authoritative parenting on children's academic achievement motivation: A comparison between the United States and Japan. *North American Journal of Psychology*, *16*(2), 359-382. Retrieved from http://search.proquest.com.ezp.waldenulibrary.org/docview/1534958903?accountid=14872

Waters, T., Vandevivere, E., Bosmans, G., Dujardin, A., & Waters, H. (2015). Secure base representations in middle childhood across two western cultures: Associations with parental attachment representations and maternal reports of behavior problems *Developmental Psychology, 51(8),* 1013-1025. doi:10.1037/a.0039375

Weldon, W. (2011). Review of parental involvement and academic success. *The School Community Journal 21*(1). 177-183. Accession Number: 2011-16063-012

Wentzel, K.R., Battle, A., & Russell, S. (2009). Social supports from teachers and peers as predictors of academic and social motivation. *Contemporary Educational Psychology 35(*3), 193-202. EJ890839.

Williamson, G. M., Walters, A. S., & Shaffer, D. R. (2002). Caregiver models of self and others, coping, and depression: predictors of depression in children with chronic pain. *Health Psychology*, *21*(4), 405. doi:10.1037//0278-6133.21.4.405

Williams, T., & Sanchez, B. (2012). Parental involvement and un-involvement at an inner-city high school. *Urban Education 47(*3), 625-652. doi:10.1177/0042085912437794.

Williams, T. & Sanchez, B. (2013). Identifying and decreasing barriers to parental involvement for inner-city parents. *Youth & Society 45(*1), 54-74. doi:10.1177/0044118X11409066

Wood, J. (2007). Academic competence in preschool: Exploring the role of close relationships and anxiety. *Early Education and Development, 18*(2), 223-242. doi:10.1080/10409280701282868.

Worley, C.L. (2007). At-Risk students and academic achievement: The relationship between certain selected factors and academic success. (Doctoral dissertation). https://thesses.lib.vt.edu/theses/available/etd-06132007

Wu, W. L., Zhang, W., & Liu, X. H. (2004). The reliability and validity of adult attachment scale (AAS-1996 revised edition): a report on its application in China. *Journal of Sichuan University. Medical science edition*, *35*(4), 536-538. PMID: 15291121

Xu, M., Kushner Benson, S. N., Mudrey-Camino, R., & Steiner, R. P. (2010). The Relationship between Parental Involvement, Self-Regulated Learning, and Reading Achievement of Fifth Graders: A Path Analysis Using the ECLS-K Database. *Social Psychology of Education: An International Journal, 13(2)*, 237-269. doi:10.1007/s11218-009-9104-4

Yamamoto, Y. & Holloway, S. (2010). Parental expectations and children's academic in sociocultural context. *Educational Psychology Review 22(3).* 189-214.

doi:10.1007/s10648-010-9121-z

Yanghee, K. (2009). Minority parental involvement and school barriers: Moving the focus away from deficiencies of parents. *Educational Research Review 4(*2), 80-102. doi:10.1016/j.edu

Young, C. Y., Austin, S. M., & Grove, R. (2013). Defining Parental Involvement: Perception of school administrators. *Education, 133*(3), 291-297. EJ1022237

Zentall, S.S. & Belke, S.M. (2012). Achievement and social goals of younger and older elementary students' response to academic and social failure. *Learning Disability Quarterly, 35(*1), 39-53. doi:10.1177/0731948711429009

Zychinski, K.E. & Polo, A.J. (2012). Academic achievement and depressive symptoms in low-income Latino youth. *Journal of Child and Family Studies, 21*(4), 565-577. EJ973262.

Appendix A:

Your Child's Grade Questionnaire

Please use your child's end-of-school-year report card for his/her most completed school year to record their grade in the following subjects below: (Example: If your child is in third grade during October 2017, you would use your child's report card from second grade that came out in May or June of that same year).

Please circle the grade your child received in the following subjects.

Language Arts:

A=90-100 B=80-89 C= 70-79 D=Below 70

Reading:

A=90-100 B=80-89 C= 70-79 D=Below 70

Mathematics:

A=90-100 B=80-89 C= 70-79 D=Below 70

Appendix B:

Authors' Permission to Use Their Instruments

Parental Internal Attachment Patterns/ Relationship Scales Questionnaire

From: Kim Bartholomew

Sent: Thursday, June 22, 2017 4:33:23 PM

To: John Trentalange

Subject: Re: Dissertation Request

Dear John,

You are welcome to use any of my self-report measures of attachment for your dissertation research. You can find a copy of the measures and information on their use on my website.

Regards,

15 November, 2017

Parenting Styles/ Parenting Style Scale

To whom it may concern,

I grant permission for John Trentalange of Walden University to use the Parenting Style Scale in his thesis.

The scale was featured in the following manuscript:

Saunders J, Hume C, Timperio A, Salmon J. Cross-sectional and longitudinal associations between parenting style and adolescent girls' physical activity. Int J Behav Nutr Phys Act 2012;9. doi: 10.1186/1479-5868-9-141

The scale was adapted from:

Baumrind D. Current Patterns of Parental Authority. Dev Psychol 1971, 4(1):1–103.

Best wishes,

Prof Jo Salmon

Parenting Style Scale Version Attached: Full Test Note: Test name created by PsycTESTS PsycTESTS

Citation: Saunders, J., Hume, C., Timperio, A., & Salmon, J. (2012). Parenting Style Scale [Database record]. Retrieved from PsycTESTS. http://dx.doi.org/10.1037/t22673000

Instrument Type: Rating Scale Test Format: Items on the Parenting Style Scale are scored on a 5-point scale: never (1); rarely (2); sometimes (3); often (4); and always (5).

Source: Saunders, Julie, Hume, Clare, Timperio, Anna, & Salmon, Jo. (2012). Crosssectional and longitudinal associations between parenting style and adolescent girls' physical activity. The International Journal of Behavioral Nutrition and Physical Activity, Vol 9. doi: 10.1186/1479-5868-9-141

Parental Involvement/ PASS Parent and School Survey:

Subject: Re: Dissertation Study

Good luck John. Approximately 10 minutes. Perhaps slightly less. And permission granted.

Thanks for asking.

Appendix C:

Linear Regression Assumptions

Regression is used when using an equation to examine the relationship between a dependent variable and its predictor variables (Montgomery, Peck, Vining, 2012). Linear regression is used when the dependent variable in the study is continuous. A variable is continuous when the data is a linear manner, has a numerical range, and it is appropriate to use linear regression to determine correlations and mediation (Montgomery, Peck, Vining, 2012; Murray, Masiello, 2019; Yi Jyun Lin, 2019; Mahmud, 2019; Famuyiwa. 2019).

There are five assumptions for linear regression.

The first assumption that the relationship between the independent variable (parents' internal attachment patterns and parenting styles and the dependent variable (children's GPA's) is a linear relationship. Figure 1 below shows a scatterplot for the relationship between parents' internal attachment patterns (IV) and children's GPAs (DV) (Model 1) with some outliers. The majority of scores falls within the range from -2 to 2 on both the x-axis and the y-axis, which is the range to determine normality and linearity. Figure 2 below shows a scatterplot for the relationship between parenting styles (IV) and children's GPAs (DV) (Model 2) with some outliers. The majority of the scores for model 2 falls within the range from -2 to 2 on both the x-axis and the y-axis, the range to determine normality and linearity. Assumption 1 has been met.

Figure 1

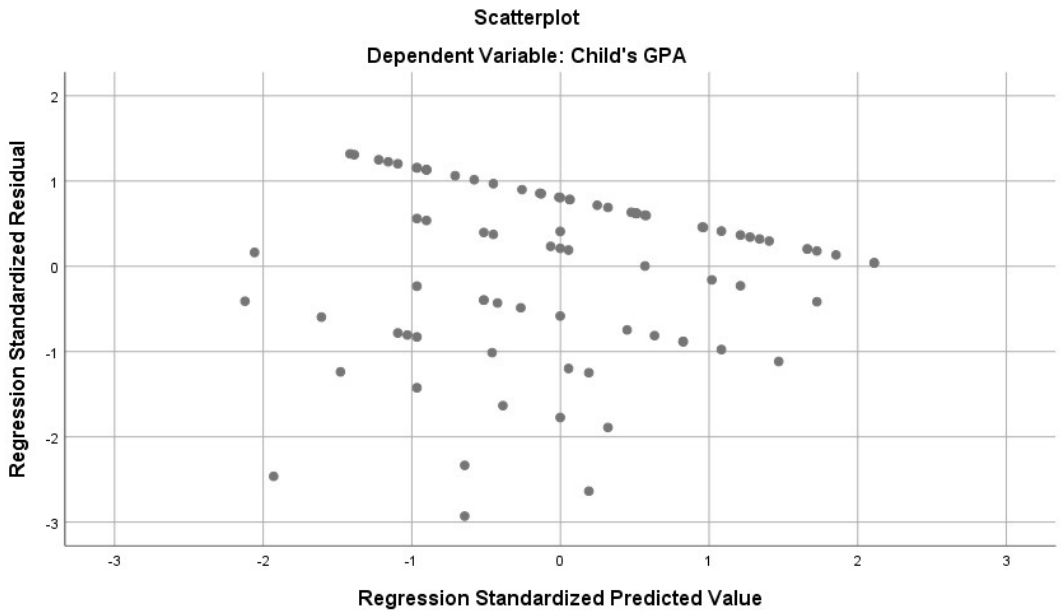
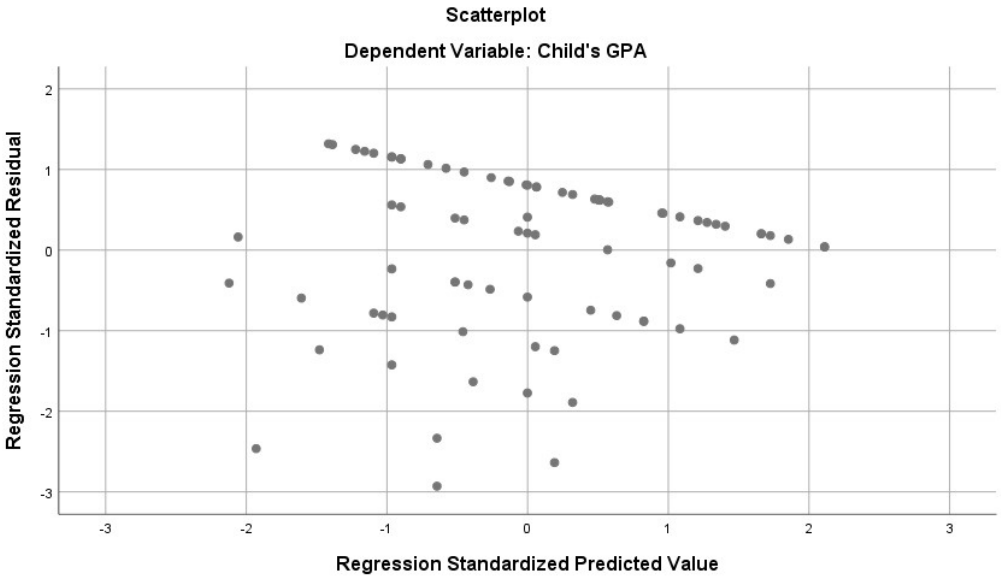


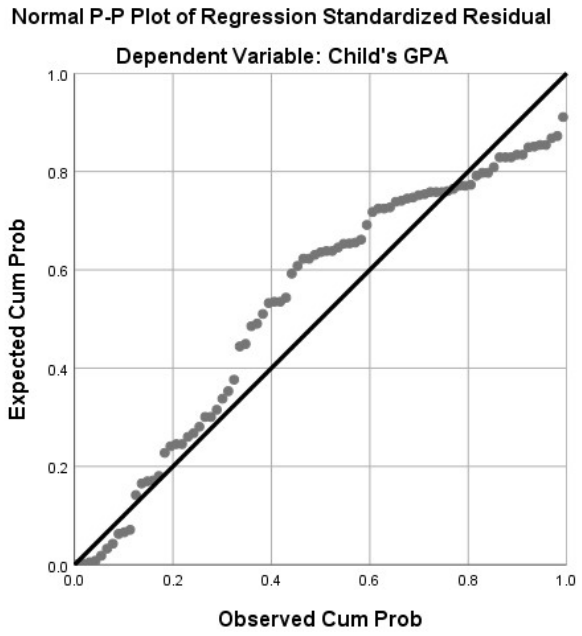
Figure 2

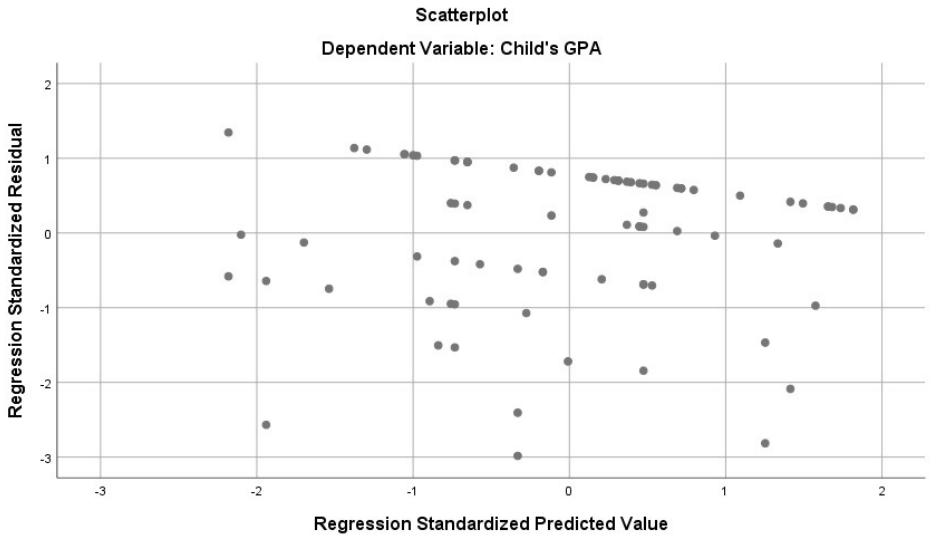


The second assumption is that all the variables in the study are multivariate normally distributed. Typically, the "normality assumption" often is checked from the histogram of the dependent variable. Statistically, however, it is more accurate to check that the errors of a linear regression model are distributed normally or the dependent variable has a conditional normal distribution (rather than if the dependent variable complies fully with a normal distribution) when evaluating whether the "normality assumption" is fulfilled for linear regression (Li, Wong, Lamoureux, Wong, 2012). What the normality assumption really requires is that the *error term*, not the dependent variable, be normally distributed. Violations of this can invalidate basic hypothesis tests like t-tests and F-tests, which rely on normally distributed errors (Mac Tan, 2019). An important concern for standard regression is outliers. Other deviations from normal distributions are less likely to invalidate your analysis (Brown, 2017). It is a common misbelief that the outcome variable in linear regression needs to be normally distributed. Only residuals need to be normally distributed (Li, Wong, Lamoureux, Wong, 2012; Brown, 2017). None of your observed variables have to be normal in linear regression analysis, which includes t-test and ANOVA. The errors after modeling, however, should be normal to draw a valid conclusion by hypothesis testing (Kim, 2015). "In linear regression, a common misconception is that the outcome has to be normally distributed, but the assumption is actually that the *residuals* are normally distributed. It is important to meet this assumption for the p-values for the t-tests to be valid" (Introduction to SAS. UCLA: Statistical Consulting Group, 2016).

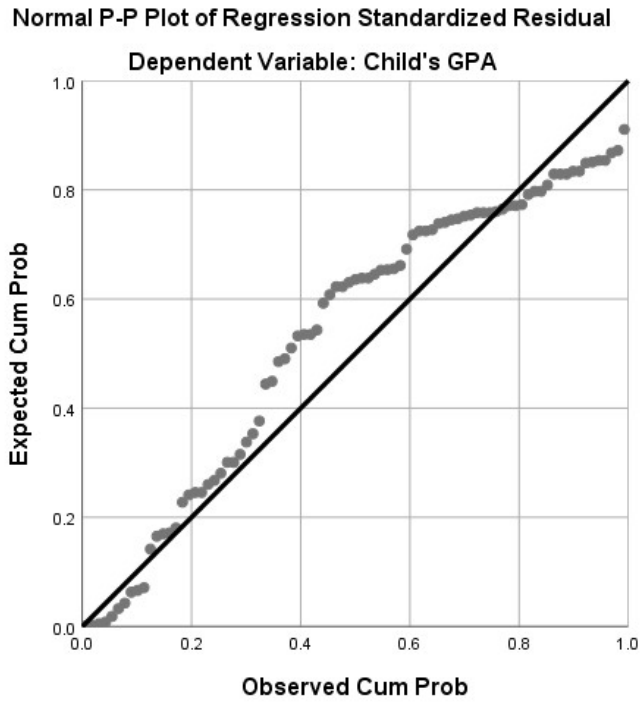
The scatterplots below show the number of scores that are outliers and the number/percentage of scores that form a normal distribution. Scores that lie outside of the range -2 to 2 on the x-axis or on the y-axis are considered to be outliers or influential cases. The majority of the scores for my study shows to be within the range of -2 and 2 on the x-axis and between -2 and 2 on the y-axis. Therefore, assumption 2 has been met. In addition, I also used Cook's-D in order to test for influential cases, which is discussed later in this paper.

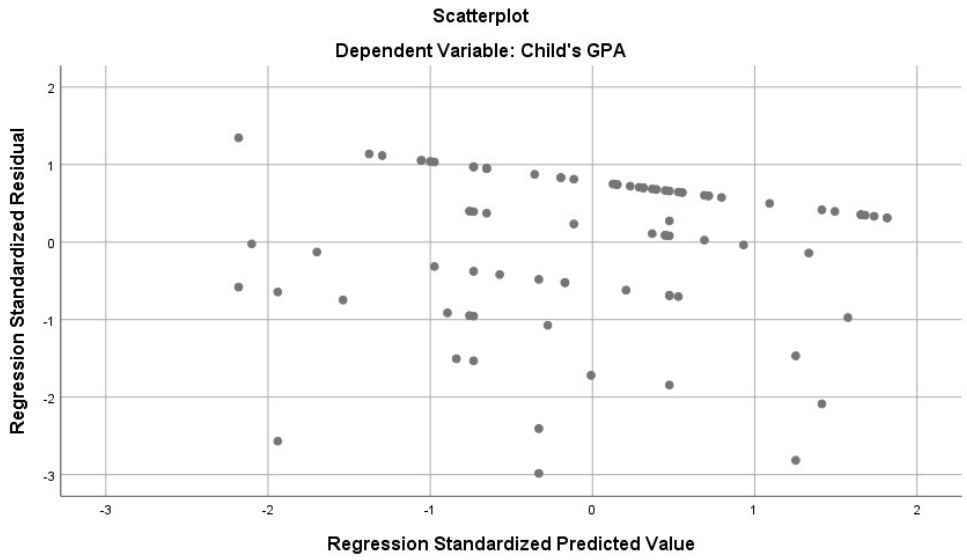
Model 1




Scatterplot
Dependent Variable: Child's GPA
Regression Standardized Residual
Regression Standardized Predicted Value
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2

Model 2


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Child's GPA
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0



The third assumption is called multicollinearity, which refers to the independent variables being too highly correlated with each other. When there is more than one variable in a study that measures the same thing, then multicollinearity is high and the standard of errors is inflated. The degree of multicollinearity in a study is determined using the variance inflation factor (VIF). A VIF (variance inflation factor) of greater than 5 represents the variables are highly correlated, while a VIF from 1 to 5 represents variables being moderately correlated, and a VIF of 1 represents no correlation. In this study, the independent variables (parents' internal attachment patterns and parenting styles) shows a VIF at 1.074 for each model (see Table 1) and therefore have almost no correlation. Assumption 3 has been met.

Table 1: Model 1

Coefficients

	Unstandardized Coefficients		Standard Coe			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	96.002	2.850		33.680	.000		
Relationship Styles	.721	1.181	.068	.611	.543	.931	1.074
Parental Involvement	-.108	.053	-.227	-2.047	.044	.931	1.074

The fourth assumption refers to auto-correlation, which is when the residuals are not independent from each other. The Durbin Watson Statistic is a test used to determine autocorrelation in the residuals from a statistical regression analysis. The Durbin-Watson statistic will always have a value between 0 and 4. A value of 2.0 means there is no autocorrelation detected in the sample. Values from 0 to 1.9999 indicate positive autocorrelation and values from 2 to 4 indicate negative autocorrelation. The Durbin-Watson statistic for model 1 in my study (parents' internal attachment patterns-IV and children's GPAs-DV) shows 2.07 (Table 1), essentially no autocorrelation. In model 2 (parenting styles-IV and children's GPAs-DV) shows the Durbin-Watson statistic 1.986 (Table 2), essentially no autocorrelation. Assumption 4 has been met.

Table 1: Model 1

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.127[a]	.016	.004	5.29220	2.077

a. Predictors: (Constant), Relationship Styles
b. Dependent Variable: Child's GPA

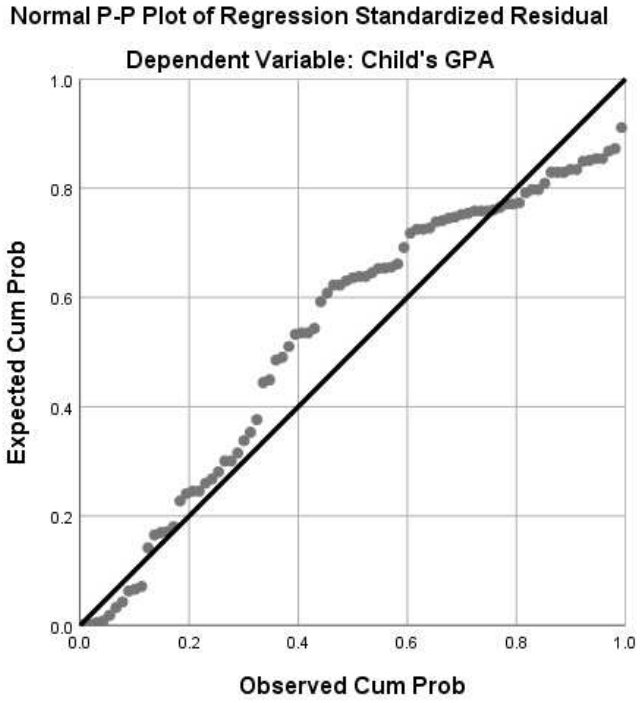
Table 2: Model 2

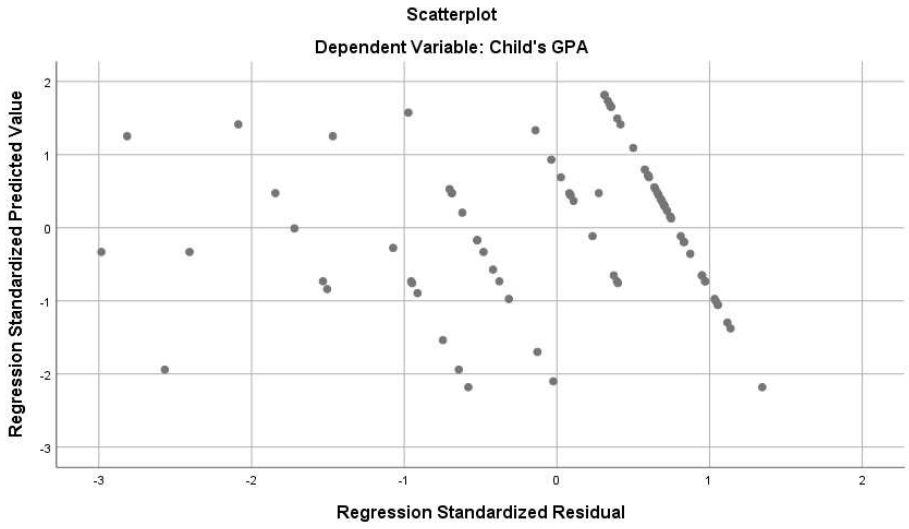
Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.241[a]	.058	.047	5.17864	1.986

a. Predictors: (Constant), Parenting Style Scale
b. Dependent Variable: Child's GPA

The fifth assumption refers to homoscedasticity, which occurs when each value of the independent variables aligns with the dependent variable in the study. The charts below show that the variance of the independent variables are very near to the regression line, and therefore pass the test for homoscedasticity. Assumption 5 has been met.


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Child's GPA
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0



I added a sixth assumption, which was to check for outliers in my data. Influential cases or outliers have the potential to distort or skew conclusions drawn from data. No data set will have perfect distribution; however, it is important that the data set has as few outliers as possible. Cook's D is used in linear regression to detect influential cases or potential outliers. Specifically, the researcher needs to investigate any point over 4/n, where n is equal to the sample size or the number of responses/observations in the study. In this study, 4/85 is equal to .047. For model 1, where parents' internal attachment patterns is the independent variable and children's GPAs is the dependent variable; Cook's D shows that there are 6 influential cases: ID 55 has a Cooks' D equal to .14544; ID 38 has a Cook's D equal to .09911, ID 52 has a Cook's D equal to .06361, ID 41 has a Cook's D equal to .06093, ID 44 has a Cook's D equal to .05121, ID 58 has a Cook's D equal to .04830. For model 2, where parenting styles is the independent variable and children's GPAs is the dependent variable; Cook's D shows that there are 3

influential cases: ID 58 has a Cook's D equal to .14556, ID 38 has a Cook's D equal to .08004, ID 52 has a Cook's D equal to .05806.

In addition, I examined the data for the influential cases in my study to determine if there is a pattern that would cause these participants to be outliers in the study. Four of the participants (ID-52, ID-58, ID-55, ID-44) had scores showing low parental involvement. Two of the participants (ID-38 and ID-41) had scores showing moderate parental involvement. In this study, approximately 50% of the participants had scores showing low parental involvement in their children's education. The participants' children's GPAs varied for each participant. Two of the participants, ID-52 and ID-55 showed a possible contradiction in their scores. For example, both ID-52 and ID-55 scored authoritative for their parenting style and dismissive for their parent's internal attachment pattern. The authoritative parenting style shows parental warmth, parental sensitivity and engagement in their child's life and education. The dismissive parent's internal attachment pattern shows a lack of interest in the lives of others and a lack of interest in forming relationships with others. Therefore, participants (ID-52 and ID-55) may have contradicted themselves in their answers or these participants (ID-52 and ID-55) may actually see themselves as engaged parents as well as individuals who are not interested in relationships. Participant ID-58 scored authoritarian parenting style and a dismissive parent's internal attachment pattern with his child's grades as all A's. The authoritarian parenting style shows a lack of parental warmth, a lack of parental sensitivity toward their child, and a high need for control. The authoritarian parenting style has been shown to negatively influence young children's educational progress

(Baumrind, 1971). The dismissive parent's internal attachment pattern is described above. The combination of an authoritarian parenting style, a dismissive parent's internal attachment pattern, and low parental involvement in his/her child's education would predict a lack of success for the child in his or her education (Baker & Rimm-Kaufman 2014; Cote et al., 2014; Friedman et al., 2014; Trentacosta et al.2008). However, this participant (ID-58) reports that his child's grades are all A's. The influential cases in this study show no particular pattern and are therefore random cases.