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Fatherless Homes And Implications On Student Achievement

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ABSTRACT

The primary purpose of this quantitative study was to determine if there is a relationship between fatherly involvement in students' lives and select factors of student descriptors and school success. Specifically, the study sought to discover if there is a significant relationship between fatherlessness and student success and if there is a significant relationship between fatherlessness and select student descriptors. Descriptive statistics and linear regression were used to interpret and analyze the data for the study. There were 1,780 respondents who participated in the study. Respondents included seniors from rural, suburban, and urban public schools.

In conducting this study, the following inferential questions were addressed and analyzed by a comparison of responses submitted by public school principals from Indiana public schools:

1. Are there differences on the proportions between fatherless homes and homes with fathers based on the socioeconomic status of the student? Specifically, the Pearson chi-square test was selected to determine goodness of fit and examined whether the distribution was higher in one group than expected. The result of the Pearson chi-square test indicated a significant difference in the expected and actual counts within the two-by-two design, providing justification to split the remaining null hypotheses into two different samples based on lunch status.
2. Is there a significant difference on academic achievement based on the presence or absence of a father in the home for students eligible for free-and-reduced price lunches? This question revealed there was a significant difference. These students, if

they did not have a father in the home, scored lower on Indiana End of Course Assessments (ECA; i.e., English/language arts and Algebra I), and college admission standardized tests (i.e., ACT, SAT, PSAT).

3. Is there a significant difference on academic achievement based on the presence or absence of a father in the home for students not eligible for free-and-reduced price lunches? It was found that there was a significant difference. Students who do not have a father in the home scored lower on Indiana ECA (i.e., English/language arts and Algebra I), and college admission standardized tests (i.e., ACT, SAT, PSAT).
4. Does attendance, discipline, fatherlessness, grade point average (GPA), and gender serve as a predictor for academic achievement for students not eligible for free-and-reduced price lunches? This question demonstrated that discipline and GPA served as predictors for academic achievement for this group of students.
5. Does attendance, discipline, fatherlessness, GPA, and gender serve as a predictor for academic achievement for students eligible for free-and-reduced price lunches? It was found that attendance, fatherlessness, GPA, and gender serve as predictors for academic achievement for this group of students.

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CHAPTER 1

INTRODUCTION

Study Rationale and Foundation

"Children whose fathers are stable and involved are better off on almost every cognitive, social, and emotional measure developed by researchers" (Carter, 2010, para. 4). From the point of conception, fathers play a critical role in their children's lives and their achievement. Fatherless homes, however, do affect children from an academic standpoint and future success (Thomes, 1968). A number of years ago, sociologist Mott (1990) asked the question, "When is a father really gone?" (p. 499). Interestingly, "his analysis of offspring with nonresident fathers showed the categorical variable, *father absence*, masked movement of male parents in and out of the child's home" (Mott, 1990, p. 507). Corneau (1991) designated quality time as a physical and emotional involvement from a biological father, father figure, or a step-father. Regardless of the type of father, the involvement and the amount of time spent with the child has to be meaningful and genuine (Blankenhorn, 1996). The amount of parental involvement is dependent upon the child and the needs each child has.

Meaningful and genuine time spent between a child and his or her father will increase the child's odds of being successful socially, educationally, and can serve to reduce stress in children (Daniels, 1998). Children who have fathers who spend meaningful time are "43 percent more likely to earn mostly A's and 33 percent less likely than other children to repeat a grade"

(Rosenberg & Wilcox, 2006, para. 6). A father's involvement is critical because children tend to make decisions to engage in a range of criminal behaviors that often have a negative impact in their lives from a fiscal aspect (Parker, 2014). It is vital to the student to have a male role model for them, or they are more prone to misbehave and develop delinquent behavior patterns (Corneau, 1991). "Seventy percent of juveniles in state reform institutions grew up in single or no-parent situations" (Beck, Greenfield, & Kline, 1988, p. 100). Therefore, children who do not have a suitable male role model at home tend to model after men with whom they have developed a relationship. Children have the ability to learn moral values from their families and by relying on parents to be role models (Blankenhorn, 1996). Unfortunately, some children do not have the luxury of having parents as a role model. Schools are a place for teachers, counselors, and administrators to be parents and mentors for students. This mentoring process and modeling is crucial to the students who are without father figures (Corneau, 1991).

Schools are no longer just educational institutions. When education was first institutionalized in April, 1635, in Boston, Massachusetts, institutions were created to educate children and adults of the new colonized world (Urban & Wagoner, 2009). According to the U.S. Department of Education (USDOE), the American educational system must continue to improve and persist as the best worldwide (USDOE, 2004). All students need to excel, not just some. President Bill Clinton agreed and wanted to support school improvement to its highest levels of performance (USDOE, 2004). Schools were designed for students to learn the core subjects and incorporate morals and values. In today's society, schools are no longer just an educational facility.

Several factors encourage a child's academic achievement or contribute to a child's poor school performance. Children who stem from families that have absent parents and who are

emotionally distant, preoccupied, or have parents that have unethical morals, the learning of moral values by children are greatly hindered (Popenoe, 1998). Additionally, it was found that "children reared by a divorced or never-married mother are less cooperative and score lower on tests of intelligence than children reared in intact families" (Duncan, Brooks-Gunn, & Klebanov, 1994, p. 26).

Statement of the Problem

Parents face a host of difficult problems and challenges when raising a child. These challenges include divorce, financial strain, drugs, work, social media, and time management. All of these challenges can interfere with the parent's ability to meet a child's needs. According to studies conducted over the past three decades, when children experience fatherlessness, they often respond with various emotional difficulties, which maintain a negative parent-child relationship change including conduct problems, emotional disturbances, poor interpersonal relationships, and academic difficulties (Amato, 2000).

Children need physical and emotional involvement from a father, whether a biological father, father figure, or a step-father; it is crucial to a child's learning and social development (Blankenhorn, 1996). Regardless of the type of father, the involvement and the amount of time spent with the child must be meaningful and genuine. Krampe (2009) found in her study that

> from the offspring's perspective, the central feature of the instrumental father is the teaching, mentoring male parent. This is the father who helps the child learn new things and develop new skills, beginning with play in infancy and early childhood, and branching out to include schoolwork, hobbies and sports, [solving problems], thinking about the child's future, and achieving career goals. (p. 891)

The amount of parental involvement is dependent upon the child and the needs each child has. Fathers who are heavily involved provide children the opportunity to develop higher levels of self-control, social skills, and confidence therefore reducing their chances "to act out in school or engage themselves in risky behaviors" (Anthes, 2010, para. 7). Developing a greater understanding of how parents can impact their children's life increases the children's odds of being successful socially and educationally, reduces behavior problems in school, and reduces stress on the child.

As noted by Rosenberg and Wilcox (2006), children who have engaged, caring fathers have higher academic performance. Building on educational impact, Nord (1998b) noted that children in father-only households are "more likely to do well academically, participate in extracurricular activities, enjoy school, and less likely to have ever repeated a grade or expelled compared to children whose fathers were less involved in their schools" (p. 2). Father involvement and its effect on academics, extracurricular participation, overall educational satisfaction, and exclusion, had implications "for both two-parent and single-parent households and was distinct and independent from the effect of mother involvement" (Nord, 1998b, p. 2). In fact, a number of studies suggest that children who have "higher IQs, as well as better linguistic and cognitive capacities are the results of fathers who were involved, nurturing, and playful" (Rosenberg & Wilcox, 2006, para. 2.2) during the child's infant years.

When fathers are involved at an early age, toddlers have the ability "to start school with higher levels of academic readiness, are more patient and can handle the stresses and frustrations associated with school more readily [learned] than children with less involved fathers" (Pruett, 2000). According to Rosenberg & Wilcox (2006), "A 2001 U.S. Department of Education study found that highly involved, biological fathers had children who were 43 percent more likely than

other children to earn a bachelor's degree" (para. 4). As well, they were "33 percent less likely than other children to repeat a grade" (Rosenberg & Wilcox, 2006, para. 4). In an executive summary by Henderson (2010), responsibility has to be shared with the parents for children to have a successful education: "The evidence is clear—schools cannot close the achievement gap without partnering with families" (Henderson, 2010, p. 1). Further, over 40 years of research has been conducted demonstrating the importance of engaged families and how it can improve a child's academic achievement in areas such as attendance, behavior, and increases graduation rate (Hill & O'Neill, 1993).

Children who live in an environment that promotes fatherlessness "are more likely to be involved in criminal activity, premarital sexual activity, low academic performance and participate in unhealthy activities" (Baumgardner, 2011, para. 6).

> [Children] who exhibited violent behavior at school were 11 times as likely not to live with their fathers and 6 times as likely to have parents who were not married. Boys from families with absent fathers are at higher risk for violent behavior than boys from intact families. (Sheline, Skipper, & Broadhead, 1994, p. 662)

According to Rosenberg and Wilcox (2006), students who live in fatherless homes have behavior problems in and out of school. Children without fathers are not guided or directed to learn what good behaviors are; therefore, they misbehave because they do not know correct behaviors (Baumgardner, 2011). This is one of the reasons why corrupt behaviors are seen in schools and are then carried into the child's adult life creating criminal behaviors.

In 2008, "U.S. law enforcement agencies made an estimated 2.11 million arrests of young people under the age of 18" (Puzzanchera, 2009, p. 1). "Nationally, 15.3 percent of children living with a never-married mother and 10.7 percent of children living with a divorced mother

have been [excluded] from school, compared to only 4.4 percent of children living with both biological parents" (Dawson, 1991, p. 579). Therefore, the need for father involvement is crucial for children to become successful. The Centers for Disease Control and Prevention (CDC) reported "youth violence [as] the second leading cause of death for young people between the ages of 10 and 24" (CDC, 2011, para. 4). Creating family relationships and developing a deeper understanding of why and how fathers matter must be understood to significantly reduce the death rate associated with violence. Children who live without a father or a stepfather exhibit more problems with behavior, achieving goals and are less likely to socialize with students who are not a discipline problem (Sandefur, McLanahan, & Wojtkiewicz, 1992).

Purpose of the Study

The purpose of this quantitative study was to determine if a relationship exists between fatherly involvement in students' lives and select factors of student dispositions and school achievement. There is a crisis in the quality and quantity of fathers in the home, and it exists throughout the United States. This is becoming more of an epidemic as the population growth continues to rise coupled with divorce and the lack of family focus. With an attempt to gather the most unbiased information on this epidemic and dissect the information from multiple sources, this research determined new knowledge about fatherless homes.

For this study, an analysis was conducted to have a better understanding and determine if children are impacted socially, mentally, educationally, or criminally and in society due to having a fatherless home. Data were collected from different schools throughout the state of Indiana focusing on public schools that exist in urban, suburban, and rural areas. The study was significant in that it shows that fatherless children are impacted educationally regardless of race, sex, class, or social status. This study concentrated on four areas: public schools, male role

models, student behaviors, and society. This study identified whether these and other specific characteristics are inherent in the success of a student who experiences fatherlessness.

The first area of study focused on public schools and the impact academically on each student. A study of 1,334 families revealed that a father's involvement on a personal level with their children's schooling may have a positive impact on children's achievement (McBride, Schoppe-Sullivan, & Ho, 2005). "When fathers assume a positive role in their [children's] education, students feel a positive impact" (McBride, et al., p. 215).

The second area of the study focused on the male role model to determine what factors play a role in the success of a student. Fathers play an additive role when they are involved in their children's education (McBride, et al., 2005). Additionally, children in single-parent families double the high school dropout rate compared to children who derive from two-parent families (Stedman, Salganik, & Celebuski, 1988). In 1997, "families with both parents who have children under the age of 13 [spent] 1.77 hours engaged in activities with their fathers and 2.35 hours with their mothers" (Lippman, 2004, p. 17). Alternatively, children in "single parent families spent just [.42] hours with their fathers, and 1.26 hours with their mothers" (Lippman, 2004, p. 17).

The third area of the study focused on the behaviors. Children who are impacted from an economic standpoint are accompanied with "higher-than-average levels of youth suicide, lower intellectual and education performance, higher-than-average rates of mental illness, violence, and drug use" (Kamarck, Galston, Shapiro, & Beyer, 1990, p. 14) accompanied by psychological consequences are attributes of children of fatherlessness. Additionally, parental divorce and subsequent father absence have a negative impact on children (Wilson, 1993).

The fourth area of this study focused on the societal impacts on fatherless children. Fathers are role models for their children and the development of relationships. “The relationship between family structure and crime is so strong that controlling for family configuration erases the relationship between race and crime and between low income and crime” (Whitehead, 1993, p. 9).

Research Questions

This quantitative study answered six research questions.

1. Are there differences on the proportions between fatherless homes and homes with fathers based on the socioeconomic status of the student?
2. What is the current state of academic achievement for students and father presence?
3. Is there a significant difference on academic achievement based on the presence or absence of a father in the home for students eligible for free-and-reduced price lunches?
4. Is there a significant difference on academic achievement based on the presence or absence of a father in the home for students not eligible for free-and-reduced price lunches?
5. Does attendance, discipline, fatherlessness, grade point average (GPA), and gender serve as a predictor for academic achievement for students eligible for free-and-reduced price lunches?
6. Does attendance, discipline, fatherlessness, GPA, and gender serve as a predictor for academic achievement for students not eligible for free-and-reduced price lunches?

Null Hypotheses

$H_0$1: There is no significant difference on the proportions between fatherless homes and homes with fathers based on the socioeconomic status of the student.

$H_0$2: There is no significant difference on academic achievement based on current father situation for students eligible for free-and-reduced price lunches.

$H_0$3: There is no significant difference on academic achievement based on current father situation for students not eligible for free-and-reduced price lunches.

$H_0$4: Attendance, discipline, fatherlessness, GPA, and gender do not serve as predictors for academic achievement for students eligible for free-and-reduced price lunches.

$H_0$5: Attendance, discipline, fatherlessness, GPA, and gender do not serve as predictors for academic achievement for students not eligible for free-and-reduced price lunches.

Significance of the Study

Single parenting or the fatherless home is an important aspect of a child's life and is the primary focus of this study. Stocks (2011) suggested that the number of fatherless homes continues to rise.

> In 1950, only 7.38% of families with children under 18 were single-parent families. By 1970, that figure had risen to 11.35%. In the 20 years between 1970 and 1990, the total percentage more than doubled to 24.01%. By 2010, over 30% of all families with children under 18 were single parent families. That means that nearly one in three families are single-parent families. (para. 8)

This study was designed to investigate and determine if there is a relationship between fatherly involvement in students' lives and select factors of student disposition and school achievement. This study focused on student behaviors, academics, and the effects of the male

role model. Further, the results may help guide and provide an understanding of how fatherless homes impact society and may allow parents and schools to create a better understanding of how to change the long term effects of these children by understanding the importance of fathers in children's lives.

Delimitations

Delimitations are those characteristics that limit the scope and define the boundaries of a study, and thus could potentially affect generalizability.

1. Participation in this study was delimited to public schools. Thus, for many children in private or parochial schools, results from this study may not necessarily pertain to their circumstances.
2. Participation for this study was delimited to students from the state of Indiana. Since Indiana is part of the Midwest data may differ significantly from other regions of the country in terms of family or regional demographic, and thus, the findings may not apply to groups or circumstances unlike that which you are studying.
3. Participation for this study was delimited to students who were of senior status. Students who were in the 12th grade had more experience in test taking, and had life experiences allowing them to be better candidates for retrieving data.
4. Participation in this study was delimited to each student based on the overall GPA, attendance, and discipline and not based from the year in which the data were retrieved.
5. Participation in this study was delimited to students who were not of a certain ethnicity, race, or in special education.

6. Participation in this study was delimited to students who experienced fatherless homes. Children living within a same-sex marriage, either gender or sex (male/male or female/female), these combinations did not necessarily imply fatherlessness, as one of the partners would be assuming the role of the father figure. The debate over same sex marriage and determining if it is a factor was not determined in this study because it in itself is deserving of a more in depth study.
7. Participation in this study was delimited to high school principals who held membership with the Indiana Association of School Principals.

Definitions of Terms

The following are defined terms essential to this study:

According to Corneau (1991), an *absentee father* refers to "both psychological and the physical absence of fathers and implies both spiritual and emotional absence" (p. 13).

Academic College Testing (ACT) "is a college readiness assessment that is a curriculum- and standards-based educational and career planning tool that assesses students' academic readiness for college" (ACT, 2014, para. 1).

Attendance is, according to the Indiana Compulsory Law IC 20-33-2-3.2, being "physically present: in a school; or at another location where the school's educational program in which a person is enrolled . . . ; during regular school hours on a day in which the educational program is . . . being offered" (Office of Code Revision, Indiana Legislative Services Agency, 2005).

The term *deadbeat dad*

"is a father who willfully defaults on his obligation to provide financial support for his offspring" ("Dead-beat dad", n.d., p. 1).

End of course assessments (ECA) are defined by the state of Indiana as "criterion-referenced assessments developed specifically for students completing their instruction in Algebra I, Biology I, or English 10" (Indiana Department of Education [IDOE], 2011, p. 1)

The term *ethnicity* is defined as ethnic quality or affiliation or a particular ethnic affiliation or group ("Ethnicity", 2014.).

The definition of a *father* is a male parent or a man who is thought of as being like a father ("Father", 2014).

Free and reduced is defined as any student who comes from a family "with incomes below 185 percent of the poverty level [and who is] eligible for free or reduced prices in the federal School Lunch Program" (Merrell, 2012, p. 1).

Gender is defined as the state of being male or female ("Gender", 2014).

Grade point average (GPA) is defined as a calculation for all high-school-level courses based on the number of credits received and is stored in the school's student information system.

Grading scale is defined as defined

"a degree or step in a scale, as of rank, advancement, quality, value, or intensity" ("Grade," 2014, p. 1).

The *in vitro-dad or sperm father* is defined as a dad who will never know who the child is and has no ties with the child emotionally, physically, or monetarily (Blankenhorn, 1996). The term in vitro-dad derives from the medical process of in vitro fertilization (MediLexicon International Ltd., 2013).

Office referral is a discipline notice that is given to a student from a teacher or administrator and has been recorded in the school's student information system.

Preliminary Student Aptitude Test (PSAT) is defined as a standardized test that provides practice for the SAT that tests reasoning and verbal abilities (College Board, 2014).

Public school is defined by legislative code in the state of Indiana. Indiana Code 20-18-2-15 states that a "public school . . . (1) . . . means a school maintained by a school corporation; and (2) . . . means (A) a school maintained by a school corporation; or (B) a preschool, an elementary school, or a high school maintained by a state educational institution under IC 20-24.5 or another law" (Office of Code Revision, Indiana Legislative Services Agency, 2005, pp. 3-4).

Rural school district includes those with average daily attendance of fewer than 600 students (U.S. Department of Education, 2014).

Student Aptitude Test (SAT) is defined as testing reasoning and verbal abilities (College Board, 2014).

Seniors are students who are in the 12th grade and in the 12th school year after kindergarten.

Suburban school is defined as a residential district located on the outskirts of a city ("Suburban," n.d.).

Urban school district is defined by the U.S. Census Bureau (2013) as either an urbanized area or cluster that "has at least 2,500 residents but fewer than 50,000 residents" (p. 1).

CHAPTER 2

REVIEW OF THE LITERATURE

"Because of the high rates of non-marital childbearing, separation, and divorce . . . as many as half of U.S. children will spend part of their childhood living apart from at least one of their parents, usually their fathers" (Nord, 1998a, p. 1). Society faces several disturbing problems such as crime, divorce, unemployment, out-of-wedlock births, drugs, poor educational achievement, single parenting, and poverty. All of these issues should not be overlooked. According to the U.S. Census Bureau (2011), "Approximately, 23 million children in America—one out of [every] four—live in biological father-absent homes" (p. 1). Nine in 10 American parents agree this is a *crisis*. Consequently, "a *father factor* [exists] in nearly all of the social issues facing America today" (U.S. Census Bureau, 2011, p. 1). But the hope lies in the fact that children with involved fathers do better across every measure of child wellness than their peers in father-absent homes (U.S. Census Bureau, 2011). Never-married mothers have more tendencies than two-parent families to have children who have high behavior problems in school resulting in suspension or expulsion "from school [or] display emotional problems, and to engage in antisocial behavior" (Wilson, 1993, p. 12).

Parenting and parent accountability must be acknowledged in order to meet the high demand for children to be successful in life. A father figure in the residence is crucial; Krampe (2009) suggested a more significant factor than co-residence alone may be father involvement.

Society continues to question why divorce rates are at an all-time high, poverty continues to rise, street gangs are increasing in size, our prisons are overcrowded, crime rate is higher than it ever has been, and why the United State ranks below 16 other countries in academics (Rogers, 2013). All of these have the possibility of demolishing families and will continue if the evidence for fatherless homes are not reviewed and considered a main ingredient of the current problems that exist. Harris (2000) summarized several associations as to why or how fatherless homes link to the increase of divorce, crime, behavior and others.

> The rise of crime over the past 40 years [is linked] to the proportion of children reared in homes headed by a single mother. Almost all psychologists and sociologists believe that being reared without a father is bad for children, and that child reared in such homes are less likely to turn into well-behaved adolescents and well-adjusted adults. A mountain of evidence supports this belief. There is no question that [children] reared by [divorced] or never married mothers are more likely to commit crimes, become sexually active at an early age, drop out of high school and fail in their own marital relationships. (Harris, 2000, p. 628)

Challenges, Trends and Purpose of Public Education, Past to Present

Public schools are the most familiar of all civic institutions. Public school systems were born in the mid-nineteenth century and were referred to as the common school (Mondale, 2012).

> Educators and community members have debated over the best way the government should fulfill its responsibility to educate citizens. Underlying these debates are three central questions: What is the purpose of a public education? Who is to receive the educational services provided by the public? And, how does government ensure the

> quality of these educational services? In various forms, these questions lay beneath all educational changes and reform measures in American history. (Small, 2012, p. 1)

It is not surprising that the American public educational system is "rooted in a tradition that transcends the past two centuries. It can be seen as one of the greatest success stories of the nation's history" (Labaree, 2010, p. 58). From the beginning of public schools, politics and educational reform have persisted as debatable topics (Zhao, 2009). Based on the data in a global report School Choice and Accountability (Pearson PLC, 2014), the United States is ranked 17th in the developed world for education. All schools in the United States, whether in a suburban, urban, or rural setting, are being driven to be better and are heavily criticized for their performance more than ever before. The three types of schools in which children can attend in the United States are public, charter, and private schools. All of these schools are being compared by parents and other stakeholders from school to school, by county, by state, and by country. Unfortunately, the reach of educational policy is limited by more powerful socioeconomic factors, and families at risk are generally the least likely to take advantage and benefit from educational opportunities in the first place. Thus, a chance exists that even compensatory policy efforts will simply feed on the existent vicious cycle—low socioeconomic conditions and low educational achievement (Carvalho, 2001).

Pressure is increasing each year for schools to demonstrate growth in performance and to become top-rated educational facilities. Parents want to know, based on data, if their children are going to be safe, cared for, and well educated. According to a report by Pearson PLC (2014), "when it comes to school choice, good information is crucial" (p. 3). "Of the 3.2 million youths age 16 to 24 who graduated from high school in 2012, the college enrollment rate was 71.3

percent for young women and 61.3 percent for young men" (U.S. Bureau of Labor Statistics, 2012, p. 840).

"Presumably, allowing parents to choose the best schools rewards higher quality and leads to overall improvement. In practice, however, finding the means to make this happen is difficult" (Titcombe, 2013, para. 3). Schools are not only an institution in which teachers and administrators educate students in English, math, science, and social studies, but an establishment where children must be taught how to socialize, communicate, and discover themselves. Fathers who help their children "with reading or homework do significantly better academically than those children whose fathers do not" (Cooksey & Fondell, 1996, p. 702).

Educational Effects of Fatherless Homes

Education is a concern among parents and other stakeholders across the United States. One concern that continues to be overlooked is the fact that children live in single-parent homes, especially those living without a father. Staggering statistics as noted by Fagan (1997) noted that "American children from intact families have a 21 percent chance of dropping out of high school, whereas children from broken families have a 46 percent chance" (p. 6). In fact, "children living in single-parent homes or in step-families report lower educational expectations on the part of their parents, less parental monitoring of school work, and less overall social supervision than children from intact families" (Astone & McLanahan, 1991, para. 5). In support, McLanahan and Sandefur (1994) found "children who grow up in a household with only one biological parent are worse off, on average, than children who grow up in a household with both of their biological parents" (p. 1184).

As children progress through school, the statistics of students graduating from high school and advancing on to college are low. "Nationally, 29.7 percent of children [who are]

living with a never-married mother and 21.5 percent of children living with a divorced mother have repeated at least one grade in school, compared to 11.6 percent of children living with both biological parents" (Dawson, 1991, p. 581). Research suggests that father-absent children "graduate from high school and pursue post-secondary educational opportunities at a much lower rate" (Sigle-Rushton & McLanahan, 2004, p. 10), do not perform as well on standardized tests (Bain, Boersma, & Chapman, 1983), and are more likely to experiment with drugs and engage in teen-risk behaviors (Mandara & Murray, 2006) than children homes in which the father is present. More recently, a growing body of research regarding gender indicates that growing up absent a father has an increased negative effect on males in comparison to females (Mandara & Murray, 2006; Sigle-Rushton & McLanahan, 2004). As Fagan noted in 1997, "married couples seem to offer the best environment for a child's social and educational development" (p. 3).

Children who live in households that have both biological parents demonstrate higher levels parental involvement in the child's education compared to children who live in mother-only families or step-families (Zill & Nord, 1994). This provides an opportunity for scholars and other thought leaders on this topic to influence public policy by contributing new knowledge about the factors associated with academic achievement and offer next-step interventions that "promote training, education, and advocacy programs which support single parents and their children" (Barajas, 2012, p. 19).

Contemporary Challenges in Schools

The No Child Left Behind Act (NCLB) of 2001 is the most recent version of the Elementary and Secondary Education Act (ESEA) of 1965. ESEA is the federal law which authorizes federal spending on programs to support K-12 educational initiatives, and serves at the largest source of federal spending on K-12 education. Education is an important aspect of

life in which politicians, teachers, administrators, parents, and other stakeholders want to take a stance or determine how education should be delivered. The effects and importance of school reform, the importance of how and why schools need to focus on the high-stakes areas in education, and the testing programs that coincide with them cannot be understated (Berliner, 2006). According to Ray (2013), children living in mother-only households tend to "suffer dramatically in [academics, in] many cases, following the separation of the parents and the removal of the father from the house" (para. 4).

School administrators and their leadership style could change allowing them to understand how important family is and the impact family involvement has on student achievement. School administrators need to try to be creative and develop ideas to involve the entire family into the school and get them involved in activities. The concept of an administrator involving the family will undoubtedly drive family values. Involving families might keep the family together, therefore promoting education in the school (Berliner, 2006).

Schools are not only an institution in which teachers and administrators educate students in English, math, science and social studies, but also an establishment where children must be taught how to socialize, communicate, and discover themselves. Children have to be mentally nourished with love and care from a parent. For example, "fathers who cared for their children's intellectual development and their adolescents' social development were more like to advance in their careers, compared to men who weren't involved in such activities" (Snarey, 1993, p. 584).

Dropout Rates

Schools across the country are still seeing students drop out of school. Unfortunately, the dropout rate is not decreasing and the demand to decrease the dropout rate is burdensome on the education systems according to the National Center for Education Statistics (NCES, 1999).

Mann (1986) discussed dropout rates and the reasons why students drop out of school. "A national estimate suggests that 25% of fifth graders will not make it through high school graduation" (Mann, 1986, p. 307).

The NCES (1999) stated the dropout rate for 16 through 24 year olds from 1990-2011 dropped 7% among all races and gender. As of October 2012, "16.1 million persons age 16 to 24 were not enrolled in school" (U.S. Bureau of Labor Statistics, 2012, p. 1). This is a positive decrease for the United States that illustrates that some of the interventions put in place are working for the education system but are still missing the mark by far. During its first four years (1979-1982), 5,880,000 youth dropped out, but the nearly million and a half that left school each year without a degree did so for various reasons (Morgan, 1984). Morgan (1984) also estimated that students drop out of school for the following four reasons: 51% for reasons pertaining to their school experience, 21% for economic reasons, 5% for family reasons, and 23% for other reasons.

Youth older than the compulsory attendance age who have been retained in a grade and then simply walk away are the largest component of the other group. In pursuit of reform, schools have raised standards and will hold more children back. Being retained "one grade increases the risk of dropping out later by 40 to 50 percent, two grades by 90 percent" (Larson, 2012, para. 10). The likelihood that a male student will drop out of school, over that of a female student, is two thirds greater. Fifty-one percent of male students but only 33% of the female students who drop out do so because they dislike school (Morgan, 1984).

According to Coleman (2013), dropout rates are not the only concern in education and are not the only area that educators need to fix. All states want to be the best with their test scores, and when schools are compared to other countries, the United States falls considerably

short of the mark from being first. Dropout rates are a large concern to all stakeholders because they are directly affecting local schools, state numbers, and our country to country comparisons. Since the data for this dissertation is being directed toward all schools in Indiana, a need exists as well to investigate the dropout rates for Indiana. According to Merrell (2012), Indiana ties with eight other states and ranks 34th in the United States with a dropout rate of six percent.

Most states are using an accountability system and high stakes testing is the current tactic being used in order to improve student achievement in the classroom (Berliner, 2006). Yet, current policymakers and other key educational stakeholders are not pleased with the academic results educators are producing, but educators are trying to be responsive to the concerns (Berliner, 2006). However, these classrooms are in our schools, so when it is decided that these schools are not performing at the expected rate, educators go to work on improving them (Berliner, 2006).

Family and Educational Responsibilities

Long ago, Waller (1965) deemed parents and teachers as natural enemies, proposing a conflict of private and public interests, in which parents are more concerned with the individual characteristics and needs of their children than teachers can possibly be in the context of mass public schooling. Parents depend on schools and teachers for educating their children (i.e., school provides for the main, legitimate, and compulsory occupation of youngsters) and on the ethics of personal and social success with in and via school. Therefore, they are concerned that their children might be subject to injustice and harm (Waller, 1965).

Schools cannot endure all of the parental responsibilities that are to take place in a child's life. Therefore, the parental responsibilities have to be shared by the school and the parent. The gap continues to grow between the parents and the school. The present

call for more family accountability in education reduces education (i.e., a broad social phenomenon carried by various institutions and cultural practices) to schooling, confuses parenting with teaching, and limits schooling to economic purposes and outcomes (Carvalho, 2001). The intriguing fact is that "precisely when schools have extended their functions in order to encompass affective, social, and moral development objectives, and assumed shared parenting, they have come to charge families specifically with academic support" (Ravn, 2005, p. 3). Furthermore, the intrusion into the educative practices of families represents an attempt at making the home curricula uniform, at a time when diversity is celebrated in the school curriculum (Carvalho, 2001).

Several significant demographical issues underlying the problem of family and education responsibilities exist. The demographics are race, financial, marital status of parents, mental/physical ability, and sex (Carvalho, 2001). To the extent that families are culturally different and dispose of unequal cultural resources in aligning with school cultural norms, policy that stimulates family input or parental participation in school will enhance differentiated educational outcomes (Carvalho, 2001).

Students also face other challenges in the school such as bullying, hunger, violence, and overcrowding. All of these variables can make a difference on how well a student performs in a classroom or on a standardized test. Current policy discourse claims the general desirability and effectiveness of parental involvement in schooling (Nord & West, 2001). On the other hand, though this is not explicit, it is likely that policy actions will target those families at risk and those parents in need of parental education, trying to compensate for disadvantages (Carvalho, 2001). The emotionally charged and conflictive character of family-school relations regarding personal and collective interests, the ambivalence of the teaching role within the division of

educational work between family and school, and the specific function of social differentiation performed by the educational system (Carvalho, 2001).

It is important to understand why schools have a significant role in the development of a student's life. However, the educational setting is not the only factor that affects student achievement. Schools, coupled with an involved parent, contribute to the success the child has in school. Students who live in single-parent families or stepfamilies are significantly less likely to have parent involvement their children's school compared to students living in families that have both biological parents (Nord & West, 2001). Schools are an important factor in the development of a child from all aspects of life (i.e., social, academic, behavioral and mental development).

Another contributing factor to student achievement is their academic outcome. "About half of students living in single-parent families or stepfamilies have parents who are highly involved, and 62 percent of students living with both their parents have parents who are highly involved in their schools" (Nord & West, 2001, p. 19). It is crucial for both parents to be present and involved in the child's school in order for them to be successful.

> Access to both parents seemed to be the most protective factor, in that it was associated with better academic adjustment. . . . Moreover, data revealed that noncustodial parents (mostly fathers) were very influential in their children's development. . . . These data also support the interpretation that the more time a child spends with the noncustodial parent, the better the overall adjustment of the child. (Bisnaire, Firestone, & Rynard, 1990, p. 74)

The State of Fatherhood in America

According to O. Pearson (2010), based on data, having a single father versus a single mother has several advantages over having a single mother. Sowers (2010) "explained how rejection is the defining characteristic of the fatherless generation. In the United States alone,

over 33 percent of just over 25 million children are fatherless and searching for Dad. They are searching for his love and acceptance" (p. 19). Fatherlessness creates an appetite in the soul that demands fulfillment something that is called father hunger (Sowers, 2010). This hunger is described as a hunger that will continue to live throughout a young man or woman's life and will result in rejection that someone has chosen to turn his back on them, that their lives have no value and or reason, and therefore, need no support (Blankenhorn, 1996).

Children in fatherless homes are affected by four items—mental health, academics, behavior, and poverty (Ray, 2013). The father's presence in the home clearly has a significant impact on children. "The lack of a role model in the daily presence in the home is often thought to be at the root of many of society's problems, ranging from crime and drug abuse to poor academics and violence" (Ray, 2013, para. 3).

Through natural instinct the male is the dominant role model, and children want to look up to their father. Many fathers work very hard to earn the love and respect of their children. The values of hard work, family, and dedication are three tough values to uphold but the rewards are un-measureable. The problem is that the United States government does not determine the fate of the child. It is the parent's responsibility. The U.S. Department of Health and Human Services (2000) has several pieces of staggering data concerning single parent homes.

- Half of first marriages and 60 percent of second marriages in the United States now end in divorce.
- About 1.2 million divorces occur each year, involving approximately 1 million children.
- More than half of the children who live with one parent do so because of the break-up of a marriage. (p. 76)

The impact a biological father has on a child's cognitive ability and educational achievements runs parallel with student success. According to Rosenberg and Wilcox (2006), it does matter if the father is in or out of the home, if it is a biological father and not a step-father. However, this does bring up an excellent point. Does the father still have an impact on a child's education if he not at home but plays a key part in a child's life? According to Rosenberg and Wilcox (2006), the father has to be involved in three areas to be an effective parent—be present, nurturing, and caring. These three items will increase the child's odds of being successful socially, educationally, and reduces stress on the child. It also stated that children "were 43 percent more likely than other children to earn mostly A's and 33 percent less likely than other children to repeat a grade" (Rosenberg & Wilcox, 2006, para. 6).

A previous study that included a sample of 1,250 fathers revealed that "children whose fathers shared meals, spent leisure time with them, or helped them with reading or homework did significantly better academically than those children whose fathers did not" (Cooksey & Fondell, 1996, p. 697). The belief that a single mother or father can fulfill both roles of parenting has been proven to be unsuccessful. The ability to make all the decisions for religion, academics, sports, and other daily activities are burdensome and are difficult to make. The counterbalance that is seen from both parents to make these decisions together is advantages to the child for all aspects of life (Lynn, 1974).

The other aspect of and is just as important to a child's learning ability is the effects of the mental and emotional state. If a child has the benefit of having a parent who can demonstrate emotion, stimulate feeling, and behavior, the child will learn how to repeat that same and learn how to socialize with others. Without this type of learned behavior, children will not be able to socialize in school and control their emotions such as anger and depression. Lippman (2004)

suggests "that children in two-parent families spend approximately 2.21 hours with their mothers and 1.45 hours with their fathers on a daily basis compared to 1.16 hours with mothers and .25 hours with fathers among children in single-parent families" (p. 26). The culture in society today does not appreciate the aspect of marriage and children and the responsibilities it carries. Marriage is not about children anymore. It is about one's satisfaction as an adult, one's emotional well-being, and one's personal development (Stuart, 2011).

Fatherhood and Disconnects Through Divorce

"At least one-third of children experiencing a parental separation demonstrated a significant decline in academic performance persisting at least three years" (Bisnaire et al., 1990, p. 74). A more recent study found that "youth who have experienced divorce, separation, nonunion birth or students who are living in stepfamilies or single-parent families are more susceptible to school-related behavioral problems than youth who have always lived with both biological parents" (Tillman, 2007, p. 388). As history suggests, both marriage and divorce are common experiences. "Healthy marriages are good for couples' mental and physical health. They are also good for children; growing up in a happy home protects children from mental, physical, educational, and social problems" (Kazdin, 2000, p. 91). According to the CDC (2011), the divorce rate in the United States is lower than the previous two years at 3.6 per 1,000 in the population. The divorce rate may be slightly lower, but the impact divorce has on children is high. "In a study of 304 young adults, those whose parents divorced after they left home had significantly less contact with their fathers than adult children who parents remained married" (Aquilino, 1994, p. 918).

Duncan et al. (1994) discovered that children who are reared by single mothers are less cooperative and these children have lower tests scores for intelligence than children reared by

biological parents. Parents are needed to guide and educate their children. After a divorce, "the weekly contact with their children dropped from 78 percent for still-married fathers to 44 percent for divorced fathers" (Aquilino, 1994, p. 919).

Although parental support is needed, so is marital and social modeling. Children need this support and modeling from both parents. "Children whose parents separate are significantly more likely to engage in early sexual activity, abuse drugs, and experience conduct and mood disorders. This effect is especially strong for children whose parents separated when they were five years old or younger" (Fergusson, Horwood, & Lynsky, 1994, p. 944). Additionally, "sons and daughters of divorced or separated parents exhibited significantly more conduct problems compared to children who are living with both biological parents" (Amato, 2005, p. 3).

These statistics draw attention to the seriousness of the educational impact of divorce on children. "More importantly, a child who has learning difficulties and who has been surviving at school without proper identification and services will deteriorate quickly when divorce enters their world" (St. Clair, 2014, para. 4). It is imperative that teachers and the school systems identify students who are suffering through a divorce.

Students who are suffering through a divorce could be reacting to the loss of family or could be evidencing "the true nature of the students learning delays and special needs. More than one child has gone undiagnosed for more than a year because the effects of divorce that masked the brewing disaster of dyslexia and a learning processing delay" (St. Clair, 2014, para. 4). In the absence of appropriate supports, the children who are devastated by divorce heave the attribute to become the next statistic for low academics and dropout status (St. Clair, 2014).

Child and the Male Role Model

The U.S. Census Bureau (2011) shared that, "there is a [father factor] in nearly all of the social issues facing America today" (p. 1). Fathers help their children develop higher IQs, better linguistic abilities, and improved cognitive capacities when they are more playful with their children (Rosenberg & Wilcox, 2006). For example, a 2001 U.S. Department of Education study suggests "that highly involved biological fathers had children who were 43 percent more likely than other children to earn a bachelor's degree" (Rosenberg & Wilcox, 2006, para. 7).

Positive Effects of Fatherly Involvement

As fatherless homes increase, student achievement decreases. Gender or sex may not play a significant role in academic performance; however, the importance of a father figure does increase academic performance (Hansell, 2010). "Half of all children with highly involved fathers in two-parent families reported getting mostly A's through 12th grade, compared to 35.2 percent of children of nonresident father families" (NCES, 1999, p. 76). Caring fathers value education therefore contributing to a child's education and in return the child will have better educational outcomes (Hill & O'Neill, 1993).

A study conducted by Guzzo (2011) described how a father's influence effects child development by modeling. "Based on theories of socialization and social learning, this suggests that an individual's attitudes and behaviors are learned from and modeled upon the behaviors of people who were important and influential to them, making fathers a key influence" (Guzzo, 2011, p. 2). It is well documented that children learn patterns of behavior by observation. This is especially true when children observe adults. Children soon become parents themselves, they often model after their perception in which they gained from their parents' attitudes and behaviors (Davis-Kean, 2005). Notably, men typically model after their own experiences with

their fathers when adopting and modeling parenting techniques (MacRae, 2012). It may be surmised that using a modeling hypothesis would imply that men having healthy relationships with their fathers are more likely to be good fathers as well.

Based on most court rulings, the mother is typically awarded the children because of the love and emotional development that she can provide to her children. However, the father plays just as an important role as the mother does and can play even a bigger role when it comes to the emotional damage a fatherless home can place on a child (MacRae, 2012). The parent and especially the father need support from the community to be successful (Ladd, 2000). "Even from birth, children who have an involved father are more likely to be emotionally secure, be confident to explore their surroundings, and, as they grow older, have better social connections with peers" (Rosenberg & Wilcox, 2006, p. 6). What age does a father's influence start to impact a child? This is a great question because so far the research has shown that starting at the age of four weeks old, a child can identify the father's voice, and there is not an age in which it stops (Morales, Sheafor, & Scott, 2009).

When both parents have to work, child care affects the development of children 0-6 years of age. The amount of time that a child is in child care versus the amount of time they are with their parents could play an important role and make a difference in their education at the high-school level (Hansell, 2010). Painter and Levine (2004) described how both parents can predict higher test scores because both parents can provide the time and attention needed to allow the children to be successful. "Researchers have also examined the effect of parenting practices on youth and noted that parental aspirations and supervision are important predictors of youth and high school graduation" (Astone & McLanahan, 1991, p. 315).

Middle school children need support from and educational standpoint.

> In a sample of eighth graders, Downey (1995) found that children whose parents attended the local parent teacher organization and whose parents knew their children's friends received higher grades and higher test scores than children whose parents did not. Downey continued to describe the influence of how a step-father can have on children because the mother does not have to provide all of the financial means, attention, discipline, and care needed to be successful. (as cited in Painter & Levine, 2004, p. 818)

When comparing children academically, children who live in stepfamilies perform at a lower rate compared to children in a two parent family (Painter & Levine, 1999). McLanahan and Sandefeur (1994) suggested that although the stepfather contributes financially to the family income, a more important contribution "is constructing a new, satisfying marital relationship [with the mother which requires] a great deal of time and attention" (p. 1185). When the mother is the head of the household it requires a great deal of time and commitment financially which requires the mother to spend less time with her children (McLanahan & Sandefeur, 1994).

Statistics and Data on Consequences

According to the NCES, the effects of fatherless homes will continue to create a negative impact on our society (Nord & West, 2001). Students in single-parent and stepfamilies are noticing a significant drop in the amount of time parents are contributing to the child's school compared to students living in intact families (Nord, 1998a). "About half of students living in single-parent families or stepfamilies have parents who are highly involved, and 62 percent of students living with both their parents have parents who are highly involved in their schools" (Nord & West, 2001, p. 19). Children who are reared by families who have both parents have a greater chance of having a better education and a chance in life (Constantino, 2012).

In a summary of this document Nord & West (2001), stated that "fatherless children are twice as likely to drop out of school" (p. 6).

> Furthermore, from an academic standpoint, students living in father-absent homes are twice as likely to repeat a grade in school; 10 percent of children living with both parents have ever repeated a grade, compared to 20 percent of children in stepfather families, and 18 percent in mother-only families. (Nord & West, 2001, p. 21)

Additionally, a study was performed by Snell and Morton (1991) on 13,986 women in prison, which found 39% grew up without their fathers and 20% did not live with either biological parent.

Several studies have tried to prove if gender influences academic performance on children who derive from single parent homes. A study performed by Alika and Edosa (2012) "investigated the relationship between broken homes and academic achievement of students" (p. 7). The influence of gender appears to have an effect on academic performance. However, in the same study, Alika and Edosa made note of Fausto-Sterling (1995) and Friedman (1985) "suggesting there is no significant difference in cognitive ability between males and females" (para. 4).

"Although research results vary widely, the following conclusions have been drawn. Men are more abstract learners, women have more anxiety about study success, men are more intuitive, and women are more analytical and organized" (Alika & Edosa, 2012, para. 4). Alika and Edosa (2012) supported the preceding finding by making note of Hamilton (1999) who, "found that boys consistently scored higher than girls on questions requiring knowledge learned outside of school" (para. 4). Okoye (1983) "postulated that sex (gender) may have some effect on academic performance" (p. 24). Okoye also predicated achievement is more likely to occur,

based on personal effort, rather than on the gender. In summation, the preponderance of research and study findings suggests that males and females may learn differently.

Issues in Fatherless Homes

Today's society is more accepting of the fatherless home than ever before. For example, 63% of over 1,000 CEOs and human resource directors stated it was not unreasonable for a father to request or take a time off from work following the birth of a child (Pleck, 1991). In today's society children are fortunate because fathers are willing to or prefer to spend time with their children instead of dedicating extra time to their jobs (Kelly & Wallerstein, 2008). Men have also complained that work conflicts with their family responsibilities (Dudley & Stone, 2001). Meanwhile, "74 percent of men prefer a daddy-track job to a fast-track job" (Painter & Levine, 2004, p. 818).

Overall, approximately 50% of single mothers "see no value in the father`s continued contact with his children" (Kelly & Wallerstein, 2008, p. 125). However, fatherless homes face several issues other than society acceptance from the work place and family. Other areas of concern for our fatherless children in society are incarceration, crime, poverty, pregnancy, drugs, and alcohol abuse.

Societal Concerns for Fatherless Kids

Single parent homes, in today's society, are common but are being identified to have social problems. Although single-parent households are now a common in the United States, they are unable to eliminate the stigmas that are associated with them.

> In a family where there is only one parent taking care of a child or multiple children, more pressure [exists upon] the parent to find an acceptable balance between financial and child-rearing obligations. Depending on the circumstances surrounding these

households, the imbalance sometimes leads to inadequate parenting and social problems for the children and parents. (Moore, 2010, para. 1)

The other aspect of and just as important to a child's learning ability are the effects of the child's mental and emotional state. If a child has the benefit of having a parent who can demonstrate emotion and stimulate feeling and behavior, the child will learn how to repeat that same behavior and learn how to socialize with others. Without this type of learned behavior, children will not be able to socialize in school and control their emotions such as anger and depression (MacCallum & Golombok, 2004).

Several aspects of fatherless homes have effect upon children. One aspect to consider is, how absent fathers are linked to students and the reasons why they have children earlier. The absence of a father affects both males and females because the females mature quicker and hit their sexual curiosities quicker. It has the same effect on males, but females mature quicker than males. This would correlate that an absentee father affects female's education because they are likely to drop out of school because they are pregnant (Economic & Social Council, 2012). Children are no different than adults, based on the fact that they learn or process their behaviors by modeling. If children do not have positive male role models at home, they tend to model after a male who fits society's version of normal or what is accepted by their surroundings.

"Children living without their fathers are more likely to commit suicide than their peers coming from two-parent households" (Ray, 2013, para. 2). Ray (2013) also noted that "common mental illnesses reported by children living with a divorced mother include anxiety, depression, and moodiness" (para. 4). In support of this finding, Stobaugh (2014) found that "eighty percent of adolescents in psychiatric hospitals come from broken homes" (p. 142). It is important for the father and mother in the home not only being together but contributing to a loving and caring

home. Children are being introduced into gangs because the family is not present in their lives. Instead of increasing judicial punishment the system instead listened to the children and the children only wanted to be valued, to be in a family; that's why they gravitated to the gangs (Chiles, 2010).

Father Factors in Incarceration and Crime

A common theme throughout this study was the importance of building a strong relationship between the father and the child. This relationship will allow the child a chance to model and develop the necessary skills to become a successful adult (Kamarck et al., 1990). If not, the child will follow in the shadows of the parent and in this particular case, the father. Researchers have examined "father-child relationship and father's parenting style as predictors of first delinquency and substance use among adolescents in intact families. The results indicated that a more positive father-child relationship predicts a reduced risk of engagement in multiple risky behaviors" (Bronte-Tinkew, Moore, & Carrano, 2006, p. 189). Children need a father figure to intervene and encourage children to help reduce the risk of children involving themselves in crime related incidents. In mother only households, children have a greater chance of incarceration. "A 2002 U.S. Department of Justice survey of 7,000 inmates revealed that 39 percent of jail inmates lived in mother-only households" (James, 2002, p. 9). Fathers who are not present in the home do to incarceration play a significant role in the child's life and are unable to guide the child away from crime. To further support this, "approximately 46 percent of jail inmates in 2002 had a previously incarcerated family member. One-fifth experienced a father in prison or jail" (James, 2002, p. 6).

The phrase "it takes a village to raise a family" is true, but the village must also contain fathers who set the example and are able to provide structure and stability for the child. A study

was conducted using the data collected from the National Longitudinal Study of Adolescent Health (Morgan, 1984). Among the many results, it was found that teen violence will increase in neighborhoods where there are a high number of fatherless homes (Morgan, 1984). The statistical data also determined that "a one percent increase in the proportion of single-parent families in a neighborhood is associated with a three percent increase in an adolescent's level of violence" (Morgan, 1984, p. 215). In other words, children "who live in neighborhoods with lower proportions of single-parent families and who report higher levels of family time commit less violence" (Knoester & Hayne, 2005, p. 772).

Children from two-parent homes are subject to criminal activity. Statistics for single parent adolescents and their involvement in criminal activity are staggering and will continue to rise. Males from two-parent families are far less likely to be incarcerated for delinquent offenses than teenage males from disrupted families (Matlock, McGreevy, Rouse, Flatter, & Marcus, 1994). A study conducted by Coley and Medeiros (2007), established a correlation that children ages 10 to 14 and who are low-income minority had a higher probability of decreasing adolescent delinquency if the non-resident biological fathers socialized with their children.

Social Effects on Children

Another area of concern is the effects fatherless children have on society. Blankenhorn (1996) used a quote by James Q. Wilson to summarize the importance of a father and how they impact society or our communities:

> Neighborhood standards may be set by mothers but they are enforced by fathers, or at least by adult males. Neighborhoods without fathers are neighborhoods without men able and willing to confront errant youth, chase threatening gangs, and reproach

> delinquent fathers . . . the absence of fathers . . . deprives the community of those little platoons that informally but often effectively control boys on the street. (p. 31)

In 1968, Thomes described the effects absent fathers have on children. Even though his study is nearly 45-years old, little change has taken place for our society concerning the long-term effects a father has on a child's life. Divorce can be seen as the main reason why the father is absent from the home. However, that is not always the case. A father can be absent from the home for other reasons, such as their jobs. Fathers can be absent from the home because they allow their work to take priority over their family and children suffer academically because of this (Blankenhorn, 1996). For some fathers work becomes a necessity to live and provide money to survive and to others it is a choice. In either case, it has a negative impact on the development of a child from a social and academic standpoint. From an academic standpoint, Nord and West (2001) described the importance a father figure has on child and the positive results produce academically:

> Students living in father-absent homes are twice as likely to repeat a grade in school; 10 percent of children living with both parents have ever repeated a grade, compared to 20 percent of children in stepfather families and 18 percent in mother-only families. (p. 30)

The belief that it is acceptable to have a fatherless home or to be a single parent is a tragedy on society. In 1996, Blankenhorn wrote in his book, "a generation ago, an American child could reasonably expect to grow up with his or her father. Today, an American child can reasonably expect not to" (p. 1). Too many women and men believe that having sex, creating a child, and the father leaving are acceptable behaviors (Bielinski & Davidson, 2001). It is interesting to note that, "contrary to stereotypes about

low-income, unmarried parents, a significant majority—more than 8 in 10—of urban, low-income fathers and mothers are in a romantic relationship when their children are born" (Rosenberg & Wilcox, 2006, p. 12). "Most of these couples expect that they will get married. One study found that more than 80 percent expected they would get married or live together. However, only 11 percent of these couples had actually married a year later" (Rosenberg & Wilcox, 2006, p. 8). Why these couples do not marry within a year is an important question and open to speculation. Dr. Wade Horn, Assistant Secretary for Children and Families at the U.S. Department of Health and Human Services noted that it may be "because these couples receive very little encouragement to marry from the health and social services professionals with whom they come in contact" (as cited in Rosenberg & Wilcox, 2006, p. 12).

Father Factors in Poverty

"Poverty has deleterious effects on children and families whether in single- or two-parent homes" (Gadsden, 1995, p. 13). Poverty or poor was defined as "family income below the federal poverty threshold. The federal poverty threshold for a family of four with two children was $23,283 in 2012, $22,811 in 2011, and $22,113 in 2010" (National Center for Children in Poverty, 2012, para. 8).

In 2012 families "need an income of about twice the federal poverty threshold to meet their basic needs" (National Center for Children in Poverty, 2012, para. 1). "As a rule, children from single-mother homes are more likely to experience poverty at some time in their childhoods" (Ray, 2013, para. 3). Further, "children who come from a home in which the parents were never married are 64 times more likely to be poor than children from two-parent homes or those whose parents divorced" (Ray, 2013, para. 2).

Economic stress or the opportunity to help the child financially determines father involvement. For example, nonresident fathers appear to be more involved with their children when they provide financial support, often choosing not to have contact with their children when the father cannot support their children financially (Seltzer, 1991). "In poor communities, a culture and legacy of poverty has been constructed over time, creating in some but not all cases an intergenerational sense of hopelessness about the ability to make it" (Gadsden, 1995, p. 13).

From an education standpoint 57% of the "children whose parents who do not have a high school degree live in poor families" (National Center for Children in Poverty, 2012, para. 4). As well, 31% of the "children whose parents have a high school degree but no college education live in poor families" (National Center for Children in Poverty, 2012, para. 4). The "expectation that children will be able to rise above all the odds, is both unrealistic and beyond the normal expectation for most children in America" (Gadsden, 1995, p. 15). Further, "problems in school performance, in children's educational persistence, and in their self-perceptions regarding learning have been linked to poverty, much of it resulting from the inability of their fathers to support them in single parent and low-income homes" (Vosler & Proctor, 1991, p. 15). There are many examples when in most cases it is difficult to eliminate "the effects of poverty from those of limited social support for children" (Gadsden, 1995, p. 15).

Father Factors in Education

Fatherly "involvement in schools is associated with the higher likelihood of a student getting mostly A's. This was true for fathers in biological parent families, for stepfathers, and for fathers heading single-parent families" (Nord & West, 2001, p. 19). The effects start at an early age and affect one of the most critical learning aspects of a child's education, reading. The

less the fathers reads to their infants, the chances of the toddler scoring low on standard testing at age two increases (Paulson, Keefe, & Leiferman, 2009).

The role that both biological parents take during the first 24 months is crucial to "early maternal and paternal depression on child expressive language because the parent-to-child reading may play a significant role in the child's language development" (Hendricks et al., 2005, p. 127). As children mature they are developing skills that stem from their parents and others around them. This development should be driven by their parents and reading aloud to them could help in this development. "Approximately, 61 percent of 3- to 5-year olds living with two parents were read aloud to everyday by a family member, compared to 48 percent of children living in single- or no-parent families" (Federal Interagency Forum on Child and Family Statistics, 2003, para. 1). The importance of a parent reading to a child at an early age is a basic foundation for academics and can allow them to perform higher in several aspects of their life. In support of this concept, one-third of the kindergartners who were living with single-parents are behind in all three of these areas of health, social and emotional, and cognitive outcomes (Wertheimer, Croan, Moore, & Hair, 2003).

Thirty percent of the children in a study conducted by Randles (2000) evidenced a decline in academic performance after the parents separated. Moreover, data "revealed noncustodial parents (mostly fathers) were very influential in their children's development" (Randles, 2000, para. 1). Children "living in homes without a stepfather or without contact with their biological father are twice as likely to drop out of school" (Gadsden, 1995, p. 13). As children continue to grow apart from their fathers, the end result is damaging to their careers and they least likely to succeed in college (McNeal, 1995). In today's society, the importance of a post-secondary education is more important than ever. Despite the obstacles in which single

parent children are placed into, these students still have the opportunity to succeed in education. Students who live in a two parent family are 80% more likely to attend a post-secondary institution compared to students who live in single parent home (Kelly & Wallerstein, 2008).

Teen Pregnancy/Sexual Activity

Teenage children who live in a single parent home can be affected by the decisions they make when considering pregnancy and their education. "Being raised by a single mother raises the risk of teen pregnancy, marrying with less than a high school degree, and forming a marriage where both partners have less than a high school degree" (Teachman, 2004, p. 94). Children need support and encouragement provided to them to help guide them throughout the critical aspects of their lives. Females and males need to have the father present in their lives to have guidance pertaining to sex and the deprecations of premarital sex (Regnerus & Luchies, 2006). Children are affected by their surroundings and can make wellness-based, appropriate decisions regarding sexual behaviors with the proper guidance and support from their parents (American Academy of Child and Adolescent Psychiatry, 2005).

The traditional sex talk with children is a must among fatherless children (Ikramullah, Manlove, Cui, & Moore, 2009). This type of discussion is a tough conversation for both parents but is needed because it allows the parent to have a closer relationship with their child. "Adolescent girls who reported higher levels of relationship quality with their fathers were less likely to have sex before age 16, compared with adolescent girls who reported lower levels of father-daughter relationship quality" (Ikramullah et al., 2009, p. 4). It is essential for parents to have conversations with their children concerning, love, intimacy, and sex (American Academy of Child and Adolescent Psychiatry, 2005). This may be a difficult topic for parents, but it "can be very helpful by creating a comfortable atmosphere in which to talk to their children about

these issues" (American Academy of Child and Adolescent Psychiatry, 2005, p. 1128). Children and especially females need affection from their father (Regnerus & Luchies, 2006). When the proper affection from a father is provided, it can determine the precedence for future relationships the daughter will have with a male. For example, in a recent study by East, Jackson and O'Brien (2007), "exploring the perspectives of daughters who experienced fatherlessness found that women desire affection and made them more vulnerable to male attention placing them at a higher risk of being exploited by males who expressed any positive interest in them" (p. 14). Parents need to mentor their children through some of the most difficult periods of their life and one of the most difficult. Sex is one of these difficult periods and could have an everlasting effect on their child. "Each year about one million teenage girls become pregnant in the United States, and three million teens get a sexually transmitted disease" (American Academy of Child and Adolescent Psychiatry, 2005, p. 1).

Women have a greater possibility of becoming sexually active at an earlier age when a father is not present. In a study, it was determined that women without a strong father figure became sexually active as a teenager and noted that the lack of a father figure was a determining factor in their sexual drive at an early age (Burn, 2008). "Adolescent boys who had dinner with their family every day were less likely to have had sex before age 16, compared with those who report they eat dinner with their family less than five nights a week" (Ikramullah et al., 2009, p. 4).

Alcohol and Drug Abuse

According to the CDC (2011), "alcohol and other drug use among our nation's youth remains a major public health problem. Substance use and abuse can increase the risk for injuries, violence, HIV infection, and other diseases" (p. 4). "Youths are more at risk of first

substance use without a highly involved father. Living in an intact family also decreases the risk of first substance use" (Bronte-Tinkew, Moore, Capps, & Zaff, 2006, p. 189). "Even after controlling for community context, significantly more drug use is present among children who do not live with their mother and father" (Hoffmann, 2002, p. 322).

Parents should consider the effects drug and alcohol not only have on themselves and possibilities of impacting their children. Children model behaviors that are observed during time spent with their parents and especially fathers. "Fathers who smoke cigarettes were less likely to enforce antismoking rules for their children and had weaker bonds in terms of adolescent admiration and emulation" (Brook, Brook, Rubenstone, Zhang, & Gerochi, 2006, p. 1341). Parents, especially fathers, are mentors and their behaviors can be predictors of a child's lifestyle and habits. Fathers are seen as a mentor by their children; if they are drug users or smoke, the potential that a strained father-child relationship may occur (Brook et al., 2006).

Children need to bond with their parents because it allows them to develop a sense of security and belonging. Students who do not create a bond with parents could be subjected to depression and then drug abuse. A study involving college students revealed that men and women who suffered from extreme depression and associations with alcohol abuse were predictors that the child could develop the same depression and drug abuse pathway (Patock-Peckham & Morgan-Lopez, 2007). "The strengthening of father adolescent relationships are especially important to reduce adolescent drug use and fathers must emphasize the strengthening of father-adolescent relationships, regardless of the type of family structure in which the adolescent lives" (National Fatherhood Initiative, 2004, p. 1).

Father Factor and Behavioral Issues

The behaviors that are exhibited at school will often determine the pattern that the student will have once they have graduated high school. These behaviors could set the course of adult behavior for the student if it is not corrected Duncan et al. (1994). Children in a single-family home are often victims of behavioral issues, lacking in education and other long-term effects. Duncan et al. (1994) noted the detriments to a child who is raised by a single mother.

> Children reared by a divorced or never-married mother are less cooperative and score lower on tests of intelligence than children reared in intact families. Statistical analysis of the behavior and intelligence of these children revealed 'significant detrimental effects' of living in a female-headed household. Growing up in a female-headed household remained a statistical predictor of behavior. Many children who live apart from their fathers are prone to becoming court involved. Once these children become court involved, their records of arrest and conviction often block access to employment and training opportunities. Criminal histories often lock these young persons into the underground or illegal economies. (Duncan et al., 1994, pp. 11-12)

Children with involved, caring fathers have better educational outcomes (Allen & Daly, 2007). They have a higher or an increased chance of becoming successful educationally because they were guided, directed, and mentored to act or conduct themselves accordingly (Schroeder, Osgood, & Oghia, 2010). Children who are not guided, directed, and mentored to act appropriately are driven into behavioral problems. As children derive from single parent homes so does the crime rate, which is a direct correlation with behavioral issues and described by Schroeder et al. (2010).

An interesting fact stated by Hill and O'Neill (1993) is "the likelihood that a young man will engage in criminal activity doubles if he is raised without a father and triples if he lives in a neighborhood with a high concentration of single-parent families" (p. 6). It is clear that fathers are important role models. Children like adults need mentors to guide them throughout life and are given direction and parameters that allow them to make choices by themselves (Guzzo, 2011). The importance of the father mentorship and how it shapes and a child is important for maintaining authority and discipline (Daniels, 1998). "They are important in helping their sons to develop both self-control and feeling of empathy towards others, character traits that are found to be lacking in violent youth" (Daniels, 1998, p. 26). Guzzo (2011) described how a father's influence affects child development by modeling, and based on theories of socialization and "social learning, suggests that an individual's attitudes and behaviors are learned from and modeled upon the behaviors of people who were important and influential to them, making fathers a key influence" (p. 2).

It is well documented in child psychology that "children learn patterns of behavior by observing the adults around them. When adult children become parents themselves, they often model their perception of their parents' attitudes and behaviors consciously and subconsciously" (Allen & Daly, 2007, p. 22). Among men, adults rely on their experiences with their fathers or a father figure to develop mental models that frame their perspective on parenting (Nicholson, Howard, & Borkowski, 2008). "As such, the modeling hypothesis would predict men with good fathers would themselves be good fathers and vice versa" (Guzzo, 2011, p. 2)

Single Parents Raising Resilient Children

Mom and dads have different parenting styles, but one common interest for all parents is, no parents want to see their children fail and especially at school (Constantino, 2012). Parents

understand the benefits of an education and want one for their children. Regardless which parent is raising the child; the healthier the relationship the father has with the mother, the more time is spent with the children (Constantino, 2012). These same children will then mimic that relationship style with those around them. This relationship, in return, will affect the children's social development and skills which are linked to their abilities to do well in school (Rosenberg & Wilcox, 2006). "There is no denying that fathers are important, in the same way every parent is important. If that parent is loving, supportive, and positively engaged with the child, the effect will have positive ripples for the rest of that child's life" (Markham, 2014, para. 5).

According to Barajas (2012), researchers have identified several strengths that derive from single parent homes, such as strong communication, child independence between the parents, and community support. Approximately "40 percent of the children in the United States will experience a parental divorce, and about 50 percent of them will be placed at least temporarily in a single-parent household" (Portnoy, 2008, para. 2). Single mothers interact more with their children and see her as the main provider and dependable compared to children who live in a home where both parents are present (MacCallum & Golombok, 2004). Parenting is difficult enough and being a single parent can be even more difficult, but one factor that appears to be consistent is, that the parent's love underscores what is important, not necessarily based on gender (Markham, 2014). According to Byrnes (2009), single parenting is not the sole predictor of academic failure for children. "A child's well-being is affected more by their relationships with their parents, their parents' sense of competence and security, and the presence of social and economic support for the family than by the gender or sexual orientation of their parents" (Bever, 2014, para. 10). "There is no evidence that the sexual orientation of the mother influences

parent–child interaction or the socioemotional development of the child" (MacCallum & Golombok, 2004, p. 1409).

Can a child have implications with or without a father? Yes, and according to Markham (2014), when caring parents are present in a child's life, a child has the capabilities of surviving and enduring most occurrences. Children will have implications, but can also have achievement in their lives. Children "without a resident father from infancy does not seem to have negative consequences for children" (MacCallum & Golombok, 2004, p. 1). Weiss (2010) proposed that single-parent families share management responsibilities between parent and child and that, as a result, the children tend to mature more quickly.

There are several risk factors that could have an impact on the achievement of children. Such impacts are divorce, poverty, single parent homes, father absence, and more. However, when these risk factors are present in a child's life, it does not necessarily guarantee that a student will not achieve. Children in single parent homes are more susceptible to these factors, but certain outside factors help support the success of a child regardless of the parent situation or the lifestyle in the home (Barajas, 2012). A study performed by Brody, Dorsey, Forehand, and Armistead (2002) found, based on resiliency, that several children experience many discrete and chronic stressors, but these children do not fall victims to failure.

One factor that lies within the child is resiliency. The Brody et al. (2002) study also found, based on resiliency, that several children experienced many discrete and chronic stressors, but these children did not fall victims to failure. Instead, these children were found to have a relationship with their parents and had other adult relationships with people who were supportive, created a positive environment, and involved in their lives. According to Barajas (2012), "researchers have had difficulty defining and measuring resiliency and agreeing on

specific individual characteristics of resilient individuals" (p. 16). However, Hurtes and Allen (2001) "validated a self-reporting instrument designed to measure resiliency in youth known as the Resiliency Attitudes and Skills Profile (RASP). They determined that the RASP could be used to measure resilience as a unique construct" (p. 16). As cited in Barajas (2012), "Hurtes and Allen suggested that the RASP needs to be further tested across a variety of youth subcultures" (p. 16). From an education standpoint, students who experience a positive and safe classroom environment will help dilute the possibility of them experiencing failure (Brody et al., 2002).

Summary

In summary, the literature review was broken down into 10 categories: history and purpose of education in America; challenges, trends, and purpose of public education, past to present; educational effects of fatherless homes; contemporary challenges in schools, the state of fatherhood in America; fatherhood and disconnects through divorce; child and the male role model; issues in fatherless homes; social effects on children, and father factors. These 10 areas provide the foundation and define how important the father is and the role he plays in a child's life. "Children who grow up apart from their biological fathers are disadvantaged across a broad array of outcomes" (McLanahan, 2001, para. 6). As shown in Table 1, children are "twice as likely to drop out of high school, 2.5 times as likely to become teen mothers, and 1.4 times a likely to be idle-out of school and out of work-as are children who grow up with both parents" (McLanahan, 2001, para. 6)

Society overall must be made aware that fathering is more than merely providing the basic necessities such as food, clothing, and shelter. Children need more than that. Fathers need to be caring and engage in their child's life socially and physically (O'Neill, 2002). Fathers are

the base foundations of their children's lives and by being a mentor discover that fathers do matter. Families are the basis of our society (Daniels, 1998). The involvement that a father has in a child's life has an everlasting effect on his or her child, or children. The involvement will affect how children manage their emotions, their education (intelligence), self-control, and behavior. Fathers build the foundation for the future of their children (O'Neill, 2002). Fathers teach by modeling, which in return teaches their children how to act in society, behavioral, social, and to be educated (St. Clair, 2014). In order for a father to model the appropriate behavior, they first had to have been taught the correct behavior from their father (O'Neill, 2002).

Figure 1 demonstrates the thought process in which the information was gathered to collect information for this study. The model in Figure 1 represents the process flow in which this study was constructed. Fathers were first broken down into three possible types, deadbeat dad, in-vitro dad, and absentee father. These three father figures were selected because they have the possibility of having the least amount of contact with their children. The main focus was to determine if children lack achievement because of the fathers' lack of being father figures to them. The data that helped support the study was derived from the data retrieved from other sources throughout the United States and Indiana schools. This study focused on three types of high schools: urban, suburban, and rural schools. Data were taken from high school students who were in the 12th grade. As well, these students would, by this point in their lives, have had the opportunity to experience fatherlessness.

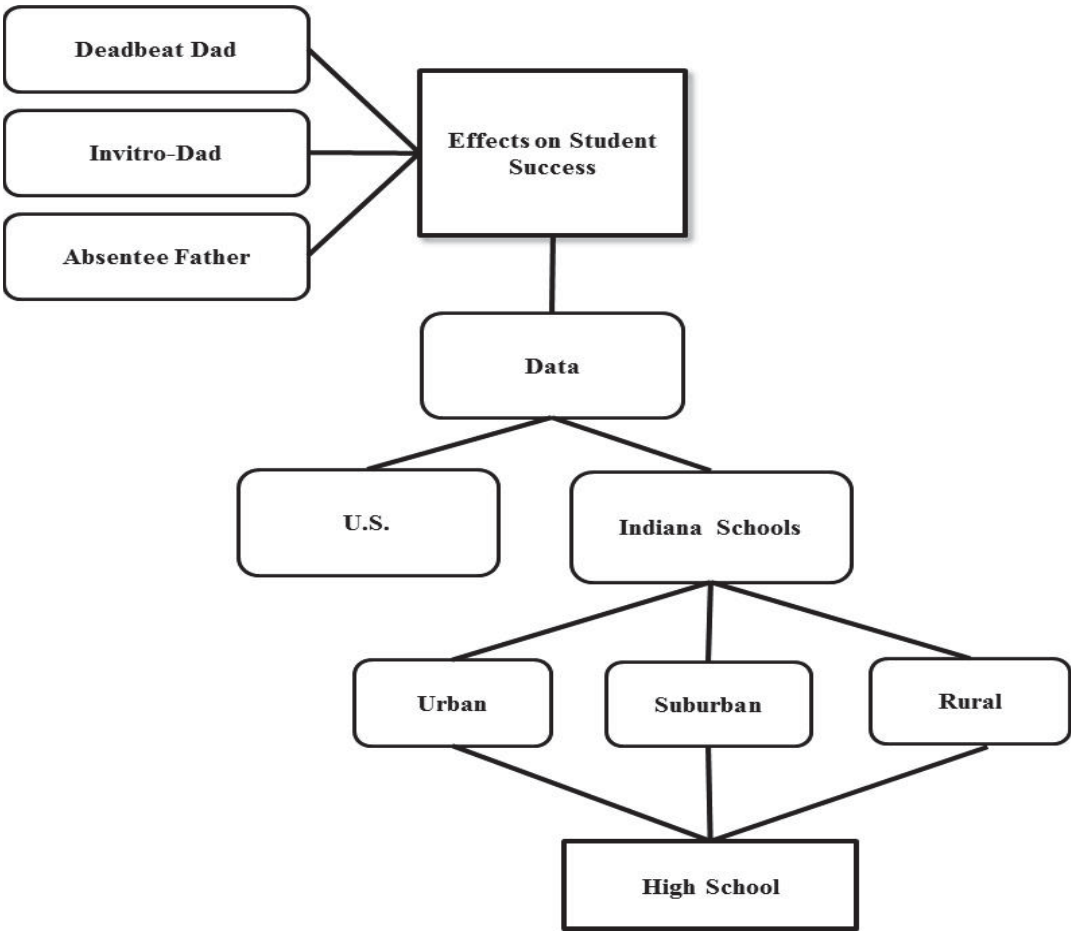

Figure 1. Fatherless homes: The effects on student achievement.

CHAPTER 3

METHODOLOGY

This chapter discusses research methodology including the null hypotheses, data sources, population of the study, data collection processes, and the instrumentation used. "Quantitative research is a means for testing objective theories by examining the relationship among variables" (Creswell, 2014, p. 4). More broadly, "research is the process of making claims and then refining or abandoning some of them for other claims more strongly warranted. Most quantitative research, for example, starts with the test of a theory" (Creswell, 2014, p. 59).

The overall design of this study factors in the following variables: fatherlessness, academics, behavior, socioeconomic status, gender, discipline referrals, and attendance rates. The purpose of this quantitative study determined if there is a relationship between fatherly involvement in students' lives and select factors of student disposition and achievement.

Research Questions

"Research seeks to develop relevant true statements, ones that can serve to explain the situation of concern or that describe the casual relationships of interest" (Creswell, 2014, p. 8). More specifically, quantitative studies "advance the relationship among variables and pose this in terms of questions or hypotheses" (Creswell, 2014, p. 8). The null hypotheses and data sources "addressed by the researcher serve to narrow and focus the purpose of the study" (Creswell, 2014, p. 20). Based on literature found and theoretical framework, this quantitative

study identified if a difference exists between fatherly involvement in students' lives and select factors of student disposition and achievement. This quantitative study answered six research questions.

1. Are there differences on the proportions between fatherless homes and homes with fathers based on the socioeconomic status of the student?
2. What is the current state of academic achievement for students and father presence?
3. Is there a significant difference on academic achievement based on the presence or absence of a father in the home for students eligible for free-and-reduced price lunches?
4. Is there a significant difference on academic achievement based on the presence or absence of a father in the home for students not eligible for free-and-reduced price lunches?
5. Does attendance, discipline, fatherlessness, GPA, and gender serve as a predictor for academic achievement for students eligible for free-and-reduced price lunches?
6. Does attendance, discipline, fatherlessness, GPA, and gender serve as a predictor for academic achievement for students not eligible for free-and-reduced price lunches?

Null Hypotheses

$H_0$1: There is no significant difference on the proportions between fatherless homes and homes with fathers based on the socioeconomic status of the student.

$H_0$2: There is no significant difference on academic achievement based on current father situation for students eligible for free-and-reduced price lunches.

$H_0$3: There is no significant difference on academic achievement based on current father situation for students not eligible for free-and-reduced price lunches.

$H_0$4: Attendance, discipline, fatherlessness, GPA, and gender do not serve as predictors for academic achievement for students eligible for free-and-reduced price lunches.

$H_0$5: Attendance, discipline, fatherlessness, GPA, and gender do not serve as predictors for academic achievement for students not eligible for free-and-reduced price lunches.

Description of the Sample

For the purpose of this study, the focus was on the records of students who were seniors and attended public schools in Indiana. The three types of schools in which the data were derived were suburban, urban and rural. De-identified records from 1,780 students were included in the data collection process. The section of the three types of schools allowed for a broad range of race, ethnic background, academic status, gender, and socioeconomic background. Students in the 12th grade were selected because they have taken necessary testing needed to satisfy the measurements needed for this research. All of the schools selected were certified public schools in Indiana and were not charter or private schools.

According to the IDOE (2015), there were 514,158 (49.1%) students who were of free-and-reduced lunch status and 531,868 (50.8%) students who were of paid-lunch status in 2013-14. Based on this data, this study had 631 (35.4%) free-and-reduced students, 1,117 (62.8%) paid-lunch students, and 32 (1.8%) were missing data. The state of Indiana based the data to include charter schools. This study did not include charter schools. Given the sample size this data is fairly representative for the state of Indiana.

According to the IDOE (2015), there were 74,935 students who were in the 12th grade in 2013-14. Based on gender there were 37,391 (49.1%) boys and 36,033 (50.9%) girls. There were 1,780 12th grade students who participated in this study. The population from this study was broken down by gender. Based on gender there were 709 (39.8%) boys and 662 (37.2%)

girls. There were 409 (23.0%) students where schools did not report gender. The state of Indiana based the data to include charter schools. This study did not include charter schools. Given the sample size this data is fairly representative for the state of Indiana.

Data Sources

"Data, evidence, and rational considerations shape knowledge. In practice, information will be collected on instruments based on measures completed by selected participants and recorded by the researcher" (Creswell, 2014, p. 97). This study was a quantitative study through the use of existing records of student success in school to determine if there is a relationship between fatherly involvement in students' lives and select factors of student disposition and achievement. The data were analyzed using the Statistical Package for the Social Sciences (SPSS) and Microsoft Excel programs to code and tabulate scores collected from each school's student information system and provided summarized values where applicable including the median, mean, central tendency, variance, and standard deviations.

Recruitment and Data Collection

"Quantitative methods involve the process of collecting, analyzing, interpreting, and writing the results of a study" (Creswell, 2014, p. 12). Letters were sent to principals (Appendix A), per building, informing principals how to collect, de-identify, and submit data to me for students in the 12th grade throughout the district. The purpose of the letter was to introduce the purpose of the data collection as well as provide instructions for completing the collection process. The cover letter also provided assurance of confidentiality for principals and schools involved, as well as anonymity for students, as their data were de-identified before that data reached my possession.

High school principals were given a specific set of instructions (Appendix B) on how to retrieve the data using the schools' current student information system. Each school must maintain records for each student. The type of student information system varied from school district to school district. However, regardless of the type of student information system, all schools have the same type of information stored within the student information system. The student information system is an electronic database which stores and maintains all of the student's private records such as: student name, social security number, date of birth, gender, parent(s) or guardian, home address, phone number, state and federal testing scores, grades, medical information, etc. For this study, the only information needed were the students most recent state and federal test scores, attendance, discipline, father listed, GPA, gender, and students who were or were not eligible for free-and-reduced price lunches. All names and other student identifiers were removed prior to the data being sent to me.

All Indiana public school corporations were invited to participate in the study. Steps in the recruitment and data collection process were as follows:

1. From among the population of all Indiana schools, the following steps were taken to identify a sample of schools for potential recruitment:
    a. Identify all public schools through the Indiana Association of School Principals and create a list of principals' e-mail addresses.
    b. There were no disqualifiers except for charter or private schools.
    c. After a period of two weeks an e-mail list of principals who had signed the consent forms was prepared and another e-mail was be sent to the participating principals with a detailed instruction booklet (Appendix B). This booklet described how to retrieve the data.

2. Once selection of the sample took place, one building principal for each school in the intended sample was e-mailed a letter (Appendix A) of request his or her participation by completing the data collection template (Appendix B).
3. Informed consent procedures noted in that letter included the following:
    a. Each building principal read the consent form in its entirety and signed the consent form (Appendix C) and return it by:
        i. fax to 765-963-3042
        ii. e-mail to tgarland@tccs.k12.in.us.
    b. The form included:
        i. Potential Risks and Discomforts
        ii. Potential Benefits to Subjects and/or to Society
        iii. Payment for Participation
        iv. Confidentiality
        v. Participation and Withdrawal
        vi. Identification of Investigators
        vii. Rights of Research Subjects
4. Principals could elect to send the form through U.S. Postal Service and could request a postage-paid envelope to the following address: 5394 South 600 East, Walton, IN. 46996.
5. After a period of two weeks an e-mail list of principals who had signed the consent form was prepared and another e-mail was be sent back to the participating principals with a detailed instruction booklet (Appendix B).

6. The data requested administrators to indicate which type (rural, urban, or suburban) of school district they were from.
7. Principals also were asked to complete the data request per Appendix B.
    a. The principal could authorize the technology director or other authorized staff members to create the data.
    b. Once the data had been collected and placed into an Excel file using Appendix B and the STN number had been removed, the principal or designee asked to return the data file.
    c. The data file was similar to what the IDOE uses to request state data. This format would be familiar to any school principal, technology director, or staff member familiar with Indiana state reports.
8. Principals sent the data to me using the following e-mail address: tgarland@tccs.k12.in.us or by U.S. Postal Service to the following address: 5394 South 600 East, Walton, IN. 46996. If requested, postage-paid envelopes were available to each participating school.

Instrument and Validation

I developed the data collection template for this study. Construct validity measures the construct within the notation it is in (Field, 2009). Content validity was established by requesting four schools to review the data collection process as described in Appendix B. These schools were not included in the data collection sample. No additional recommendations were made by the participating schools after reviewing the process.

Each school participating in the data collection process had a different type of student information system. Selecting the four types of student information systems, with each having a

different type of student information system helped determine if the data collection process was valid and user friendly. This trial process also determined if the data had any student identifiers associated with the data. The validity test was conducted prior to data collection. The principals were difficult to contact because they were typically out of the office during the summer. Once the principals returned to the office, I contacted them and immediately requested the principals to participate.

I met in person with each principal and other designees of each building at their schools and explained the reasoning for the study and the validation process. The time and date for each principal was determined based on the availability of the principal. I provided the principals an instruction booklet (Appendix B) to read to ensure clarity was obtained. Once the principals read the instructions, I then read the instructions (Appendix B) step by step and answered questions to ensure clarity was obtained. Once the principal was in agreement and understood the requirements, the principal signed the consent form (Appendix C). Once the consent form was signed by the principal, the validation process began. Each principal followed the instructions (Appendix B) and I observed the process and noted any difficulties that occurred. Once the data were extracted, I met with the principal and discussed any difficulties that occurred during the data collection process. Any difficulties that were observed or mentioned by the principal allowed me to make adjustments to the instructions to ensure it was easy to understand and did not confuse the person retrieving the data.

Data Analysis

Data were analyzed using the SPSS. This quantitative study answered six research questions and five null hypotheses, each of which helped examine if a relationship existed

between fatherly involvement in students' lives and select factors of student disposition and achievement.

Research Question 1 was answered through descriptive analysis and also used to develop a null hypothesis in order to utilize the chi-square test of independence. This determined whether the students from fatherless homes were significantly overrepresented in one of the two socioeconomic categories found within the study. This null hypothesis was also conducted prior to running the remaining inferential tests. The scores of the dependent variable were examined for potential outliers, and if the evidence of an outlier existed, the dependent variable scores were removed from the model. To further insure the validity of the inferential results, the following assumptions were tested prior to running the inferential test; assumptions of independence, normality, and homogeneity of variance.

Research Question 2 was a descriptive question. This question helped me determine if the presence of a father in the home caused implications on student academic achievement, lower discipline, and improved attendance. Student gender was also a consideration in answering this question.

Research Questions 3 and 4 allowed me to review the data to determine if there was a significant difference on academic achievement based on socioeconomic status for students based on lunch status. The statistical design for $H_0 2$ and $H_0 3$ had one independent variable and one dependent variable using an independent samples *t* test. The dependent variable was academic achievement, and the independent variable was current father situation. Having two levels on the independent variable, the independent sample *t* test was the appropriate test.

Research Questions 5 and 6 allowed me to examine the data to determine if there was a relationship between academic achievement and the predictor variables. The data were then

examined to determine if significant predictions could be made within the criterion variables (i.e., attendance, discipline, fatherlessness, GPA, and gender).

The statistical analysis for Research Questions 5 and 6 utilized multiple regression due to the multiple predictor variables and one criterion variable. The multiple predictor variables were attendance, discipline, fatherlessness, GPA, and gender. The criterion variable was academic achievement. All assumptions for multiple regression in the examination of potential outliers was conducted prior to running the multiple regression test. If significant predictors were identified within the inferential test, the unstandardized partial regression coefficient for each significant predictor was interpreted in order to demonstrate the predicted change for a one-unit increase in the significant predictor would have on the criterion variable while holding all other predictor variables constant. If more than one significant predictor was found within the inferential results, then the standardized partial regression coefficient was interpreted in order to rank the overall impact the predictors variable impact on the criterion variable since all significant variables were represented using *z* scores rather than varying metrics.

Data collected were organized and the following steps were taken to calculate an academic achievement score:

1. This process was determined by averaging the *z* scores obtained through the data collection process from state (Indiana) and federal test scores (ACT, SAT, ECA, and PSAT).
2. Transform state (Indiana) and federal test scores (ACT, SAT, PSAT, and ECA English/language arts and Algebra I) into *z* scores.
3. Average the testing *z* scores to obtain an overall academic achievement score.

4. Transfer student GPA into *z* scores based on individual school buildings to ensure GPA is standardized due to schools having different metrics to calculate GPA's. The data collected were split in two and converted into *z* scores based on lunch status of the student.

Results of the data collection were sent back to the principals who participated in the survey. Results of the data collection were kept on my computer and password protected for six months. The data source will be destroyed after three years, as per the regulations of good conduct in research.

Summary

The target audience for this research study was intended for current and future administrators, teachers, school board members, and other community stakeholders. The study examined the issue of father status and its relationship to a student's behavior and educational achievement. Both descriptive and inferential statistics were utilized to answer six research questions. The study provided information pertaining to shared values and beliefs in the society. This study also provided quantitative data for administrators and teachers to help focus their efforts on improvement strategies that positively impact student achievement.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

The purpose of this quantitative study determined if a relationship exists between fatherly involvement in students' lives and select factors of student dispositions and school achievement. This statistical design included two segments—descriptive and inferential. The descriptive data identified mean, standard deviation, frequency, and percentage results in order to describe the data collected from the sample within the study. The second segment was inferential statistics, "which tells us whether the alternative hypothesis is likely to be true" (Field, 2009, pg. 49). Chi-square was the first test to be used in the inferential section to test for independence by determining whether the students from fatherless homes are significantly overrepresented in one of the two socioeconomic categories found within the study. A sample *t* test was also utilized given two levels on the independent variable. Finally, multiple regression testing was used as a statistical procedure to determine if any of the independent (predictor) variables were predictive of the dependent (criterion) variable (Mertler & Vannatta, 2002). However, prior to running multiple regression analyses, *z* scores were calculated to put all variables on a standardized metric in order to compute a composite score for overall academic achievement for students.

The data collection template developed from the review of the literature was designed to be completed by high school principals who held membership with the Indiana Association of School Principals. Data were collected from three different school types throughout the state of

Indiana focusing on public schools that existed in urban, suburban, and rural areas. Principals were asked to gather the following information; students most recent state and college admission standardized test scores, attendance, discipline, father listed, GPA, gender, and students who were or were not eligible for free-and-reduced price lunches. This chapter presented a description of the data with a clear presentation of the results.

Descriptive Data Analysis

Research Question 1, Are there differences on the proportions between fatherless homes and homes with fathers based on the socioeconomic status of the student? is addressed in this section. There were 1,780 students who were examined based on gender, lunch status, and whether they had a father living with them in the household. Almost 40% of the sample were male participants (n = 709, 39.8%), approximately 37% were female participants (n = 662, 37.2%), and students whose gender was not included in the data collection were (n = 409, 23.0%). Additionally, of the 1,780 students, the majority of the sample reported having a father in the home (n = 1536, 86.3%), and approximately 14% reported not having a father in the home (n = 244, 13.7%). The majority of the 1,780 students reported their lunch status was paid lunch (n = 1117, 62.8%), and the students who were of free-and-reduced lunch status were (n = 631, 35.4%). There were approximately two percent of the students whose lunch status was not included in the data collection (n = 32, 1.8%).

Data were taken from each of the 1,780 students who took the Indiana ECA English/language arts and Algebra I tests, college admission standardized test scores (i.e., ACT, SAT, PSAT), and attendance. There were 538 students reported taking the SAT where potential scores range from 600 – 2400 (M = 1470.35, SD = 274.05). There were 1,470 students who took Algebra I where potential scores range from 300 – 900 (M = 608.62, SD = 93.72). There

were 1,658 students who took English 10 where potential scores range from 100 – 700 (*M* = 447.26, *SD* = 102.78). Additionally, there were 769 students who took the PSAT where potential scores range from 60 – 240 (*M* = 131.28, *SD* = 32.80), and 236 students took the ACT where potential scores range from, 1 – 36 (*M* = 21.67, *SD* = 5.66). There were 1,775 students whose data was examined to determine student attendance based on absences. The mean days missed per student was 4.76 (*SD* = 9.85).

Father in the Home

Research Question 2, What is the current state of academic achievement for students and father presence? is partially addressed in this section. Of the students with fathers in the home, there were 621 male participants (40.4%) and 572 females participants (37.2%). There were 343 students (22.3%) of the father-in-home sample where gender was not included in the data reporting. The lunch status of these students was also examined. Of the total group of 1,536 students whose lunch status was analyzed, there were 1,023 (66.6%) students who reported as paid lunch status, and 484 (31.5%) students were of free-and-reduced status. There were 29 students (1.9%) of the father-in-home sample where lunch status was not included in the data reporting. Table 1 illustrates the mean and standard deviation data for standardized tests and attendance for students with a father in the home.

Table 1

Means and Standard Deviations for Father in the Home

Test	*N*	*M*	*SD*
ACT_Raw	206	21.68	5.66
SAT_Raw	479	1,478.51	271.91
Eng10_Raw	1,434	449.42	103.02
Alg1_Raw	1,268	611.60	91.97
PSAT_Raw	670	132.21	33.50
Attendance	1,532	4.83	10.04

When the test results and attendance scores from Table 1 were compared to the whole sample results, all test scores showed increased mean scores. The test score with the highest increase in mean scores was the PSAT .93 (.71%). The SAT mean scores were 8.16 (.55%) points higher, Algebra I mean scores were 2.98 (.49%) points higher, and English 10 mean scores were 2.16 (.48%) points higher compared to the whole group sample. The test scores that showed little change in mean scores, were ACT scores with an increase of .02 (.09%) points higher compared to the whole sample. Additionally, compared to the whole group sample, students who had a father present in the home missed more days. Student attendances as measured by absences were also higher by .07 (1.53%) points when compared to the whole group sample.

Father Not in the Home

Research Question 2, What is the current state of academic achievement for students who lack a father in the home? is partially addressed in this section. Of the students without fathers in

the home, there were 90 female participants (36.9%) and 88 male participants (36.1%). There were 66 students (27.0%) whose gender was not included in the data reporting. Additionally, data were requested to have a better understanding of students who did not have a father living in the home based on lunch status. The students who were of paid lunch status represented 38.5% (n = 94), and there were 147 students who were free-and-reduced (60.2%). There were three students whose lunch status was not included (1.2%) in the data reporting. Table 2 illustrates the mean and standard deviations for standardized tests and attendance for students without a father in the home.

Table 2

Means and Standard Deviations for Father Not in the Home

Test	*N*	*M*	*SD*
ACT_Raw	30	21.60	5.75
SAT_Raw	59	1404.10	284.67
Eng10_Raw	224	433.43	100.37
Alg1_Raw	202	589.92	102.33
PSAT_Raw	99	125.01	26.93
Attendance	243	4.26	8.54

When the test results and attendance scores were compared to the whole group sample results, students who did not have a father in the home had lower mean scores than the whole group sample. The SAT mean scores were 66.25 (4.51%) points lower, Algebra I mean scores were 18.70 (3.07%) points lower, English 10 means scores were 13.83 (3.09%) points lower, PSAT scores were 6.27 (4.78%) points lower, and the ACT scores were .07 (.32%) points lower

when compared to the whole sample. Compared to the whole group sample, students who did not have a father present in the home missed fewer days. Student attendance had a lower mean score of .50 (10.50%) points when compared to the whole group sample. Based on the data in Tables 2 and 3, the standard deviations remained fairly consistent among tests.

Descriptive Data by Female Gender

Research Question 2, What is the current state of academic achievement for students who lack a father in the home? is partially addressed in this section. As noted earlier, there were 409 (23%) students whose gender was not included in the data collection. Since there was a significant amount of missing data, these students not identified by gender were below the whole sample mean. All schools were asked to collect student data based on a father living in the home. Of the students with fathers in the home, there were 572 female participants (86.4%). There were 90 female students (13.6%) who reported not having a father present in the home. Additionally, data were collected to have a better understanding of female students based on lunch status. The female students reported as paid lunch status were 438 (66.2%), and there were 205 (31.0%) female students who were of free-and-reduced lunch status. There were 19 (2.9%) students whose lunch status was not included in the data reporting. Table 3 illustrates the mean and standard deviations for standardized tests and attendance for female students without a father in the home.

Table 3

Means and Standard Deviations for Female Test Scores

Test	*N*	*M*	*SD*
ACT_Raw	78	22.82	5.62
SAT_Raw	186	1501.07	256.43
Eng10_Raw	612	457.85	94.52
Alg1_Raw	526	618.45	88.04
PSAT_Raw	279	131.84	27.09
Attendance	660	6.65	11.42

When the test results and attendance scores were compared to the whole group sample results, all scores showed an increase in mean scores. The SAT mean scores were 30.72 (2.09%) points higher, Algebra I mean scores were 9.83 (1.62%) points higher, and English 10 mean scores were 10.59 (2.37%) points higher compared to the whole group sample. Mean scores for the PSAT were .56 (.43%) points higher, and the ACT scores were 1.15 (5.31%) points higher compared to the whole group sample. Female students missed more days when compared to the whole group sample. Student attendance (i.e., as measured by absences) was also higher at 1.89 (39.71%) when compared to the whole group sample.

Descriptive Data by Male Gender

Research Question 2, What is the current state of academic achievement for students who lack a father in the home? is partially addressed in this section. Of the students with fathers in the home, there were 621 (87.6%) male students. There were 88 (12.4%) students who reported not having a father present in the home. Additionally, data were taken to have a better

understanding of male students based on lunch status. There were 462 (65.2%) male students who were of paid lunch status, and there were 234 (33.0%) students who were of free-and-reduced lunch status. There were 13 (1.8%) students in which lunch status was not included in the data reporting. Table 4 illustrates the mean and standard deviations for standardized tests and attendance for male students without a father in the home.

Table 4

Means and Standard Deviations for Male Test Scores

Test	*N*	*M*	*SD*
ACT_Raw	62	23.45	5.22
SAT_Raw	141	1569.79	259.51
Eng10_Raw	659	452.64	105.15
Alg1_Raw	550	606.25	100.17
PSAT_Raw	276	133.61	41.36
Attendance	706	5.73	10.23

When the test results and attendance scores were compared to the whole group sample results, there were four test scores that had increased mean scores and one test score showed a lower mean score. The SAT mean scores were 99.44 (6.76%) points higher, English 10 mean scores were 5.38 (1.20%) points higher, PSAT scores were 2.33 (1.77%) points higher, and ACT scores were 1.78 (8.21%) points higher compared to the whole group sample. Algebra I was unique in that it had a mean score of 2.37 (.39%) points lower than the whole group sample mean score. Male students missed more days when compared to the whole group sample. Student

attendance (i.e., as measured by absences) was higher at .98 (20.38%) points when compared to the whole group sample.

Father in the Home and Free-and-Reduced Lunch Status

Research Question 2, What is the current state of academic achievement for students who lack a father in the home? is partially addressed in this section. Of the 631 students who were of free-and-reduced lunch status, there were 484 (76.7%) students who had a father present in the home. There were 147 (23.3%) students who were of free-and-reduced lunch status and reported no father present in the home. Based on gender there were 631 students who reported having free-and-reduced lunch status. Of those, 234 (37.1%) were male students and 205 (32.5%) were female students. There were 192 (30.4%) students whose lunch status was not included in the data reporting. Table 5 illustrates the mean and standard deviation data for standardized tests and attendance for students without a father in the home.

Table 5

Means and Standard Deviations for Father in Home and Free-and-Reduced Lunch Status

Test	*N*	*M*	*SD*
ACT_Raw	68	18.04	4.40
SAT_Raw	131	1340.25	260.72
Eng10_Raw	588	417.83	107.26
Alg1_Raw	528	591.12	86.22
PSAT_Raw	246	121.06	24.66
Attendance	631	5.61	11.30

When the test results and attendance scores were compared to the whole group sample results, students of free-and-reduced lunch status had lower mean scores than the whole group sample. The SAT mean scores were 130.10 (8.85%) points lower, Algebra I mean scores were 17.50 (2.88%) points lower, English 10 mean scores were 29.43 (6.58%) points lower, PSAT scores were 10.22 (7.78%) points lower, and the ACT scores were 3.63 (16.75%) points lower when compared to the whole group sample. Students of free and reduced lunch status missed fewer days when compared to the whole group sample. Student attendance (i.e., as measured by absences) had a lower mean score of .85 (17.86%) points when compared to the whole group sample.

Father in the Home and Paid-Lunch Status

Research Question 2, What is the current state of academic achievement for students who lack a father in the home? is partially addressed in this section. Of the 1,117 students who were of paid-lunch status, there were 1,023 (91.6%) students who had a father present in the home. There were 94 (8.4%) students who were of paid lunch status and reported no father present in the home. Based on gender there were 1,117 students who reported having paid-lunch status. Of these, 462 (41.4%) were male students and 438 (39.2%) were female students. There were 217 (19.4%) students whose lunch status was not included in the data reporting. Table 6 illustrates the mean and standard deviation data for standardized tests and attendance for students with a father in the home who were also of paid-lunch status.

Table 6

Means and Standard Deviations for Father in Home and Paid-Lunch Status

Test	*N*	*M*	*SD*
ACT_Raw	168	23.14	5.49
SAT_Raw	407	1512.23	265.24
Eng10_Raw	1,068	463.64	96.33
Alg1_Raw	941	618.63	96.18
PSAT_Raw	523	136.09	35.01
Attendance	1,117	4.39	9.00

When the test results and attendance scores were compared to the whole group sample, results showed all test scores had increased mean scores. The SAT mean scores were 41.88 (2.85%) points higher, English 10 mean scores were 16.38 (3.66%) points higher, Algebra I mean scores were 10.01 (1.64%) points higher, PSAT scores were 4.81 (3.66%) points higher, and the ACT scores were 1.47 (6.78%) points higher when compared to the whole group sample. Students who were of paid lunch status missed fewer school days when compared to the whole group sample. Student attendance (i.e., as measured by absences) was lower by .37 (7.77%) points when compared to the whole group sample.

Inferential Section

Fathers and Socioeconomic Status

$H_0$1. There is no significant difference on the proportions between fatherless homes and homes with fathers based on the socioeconomic status of the student. Specifically, the Pearson chi-square test was selected to determine goodness of fit and examined whether the distribution

was higher in one group than expected (Field, 2009). The statistical design for the first null utilized the chi-square test. The two variables used in the chi-square test were lunch status and current father situation.

The result of the Pearson chi-square test indicated a significant difference in the expected and actual counts within the two-by-two design, with $p < .05$. There were 1,748 (98.2%) students who reported father presence and socioeconomic lunch status. Of these students who were examined, missing data accounted for 32 (1.8%) students. Based on the Pearson chi-square test, there were two groups that had chi-squared estimations. Students who reported having a father in the home and were of paid lunch status had a chi-squared estimation of 1,023 compared to the actual count of 963. Students who reported not having a father in the home and were of free and reduced lunch status had a chi-squared estimation 147 compared to the actual count of 87. Due to these significant differences within the proportions of the distributions among the two variables, the null hypothesis was rejected. The rejected null hypothesis provided justification to split the remaining null hypotheses into two different samples based on lunch status.

Academic Achievement Based on Father Presence and Free-and-Reduced Lunch Status

The second null hypothesis stated, "There is no significant difference on academic achievement based on current father situation for students eligible for free-and-reduced price lunches." To further insure the validity of the inferential results, the following assumptions were reported prior to the inferential test—assumptions of independence, normality, and homogeneity of variance.

The potential impact of an outlier within the dependent variable scores was examined as a means of validity. Through the use of boxplots, it was determined that no outliers among the

dependent variable scores for either group fell outside 1.5 standard deviations from the edge of the boxplots. This demonstrated that no outliers were within the dependent variable scores. Homogeneity of variance was also examined to determine that the variances within the two groups on the dependent variables were equal to each other. Levene's test for equality of error variances was observed and reported, $F = .997$, and two-tailed significance of $p = .318$. Levene's test for equality of error variances did not indicate a violation of the assumption of homogeneity of variance because the significance value was greater than .05. All assumptions for the independent samples *t* test were met.

There were 631 students examined based on academic achievement scores who were on free-and-reduced lunch. When examining these students ($n = 484$) who were reported as having a father in the home ($M = -.35$, $SD = .74$) compared to students ($n = 147$) without a father present in the home ($M = -.44$, $SD = .66$), there was no significant difference. This was evident with a non-significant independent samples *t* test, with $t(629) = 1.291$, $p = .197$. Based on the sample means for the father types, there was no significant difference; thus, the second null hypothesis was retained as illustrated in Table 7.

Table 7

Academic Achievement Free-and-Reduced Lunch

Criteria	*F*	Sig.	*t*	*df*	Sig. (2 Tailed)
Equal variances assumed	.997	.318	1.291	629.00	.197
Equal variances not assumed			1.376	268.35	.170

Academic Achievement Based on Father Presence and Paid Lunch Status

The third null hypothesis stated, "There is no significant difference on academic achievement based on current father situation for students not eligible for free-and-reduced price lunches." To further insure the validity of the inferential results, the following assumptions were being reported prior to the inferential test—assumptions of independence, normality, and homogeneity of variance.

The potential impact of an outlier within the dependent variable scores was examined as a means to ensure an individual score would not bias the results. Through the use of boxplots, it was determined that no outliers among the dependent variable scores for either group fell outside 1.5 standard deviations from the edge of the boxplots. This demonstrated that no outliers were within the dependent variable. The assumption of normality was tested using a Shapiro-Wilks test. The assumption was met as the significance value was greater than .05. Homogeneity of variance was also examined to determine that the variances within the two groups on the dependent variables were equal to each other. Levene's test for equality of error variances was observed and reported, $F = 1.427$, and two-tailed significance, $p = .233$. Levene's test for equality of error variances did not indicate a violation of the assumption of homogeneity of variance because the significance value was greater than .05. All assumptions for the independent samples *t* test were met.

There were 1,117 students examined based on academic achievement scores and paid lunch status. When examining these students ($n = 1{,}023$) who reported having a father in the home, ($M = .12$, $SD = .80$), compared to students ($n = 94$) without a father present in the home, ($M = -.18$, $SD = .95$); there was significant difference. This was evident with a significant independent samples *t* test, $t(1115) = 3.349$, $p = .001$. Based on the sample means for the father

types, there was a significant difference; thus, the third null hypothesis was rejected as illustrated in Table 8.

Table 8

Academic Achievement Paid Lunch

Criteria	*F*	Sig.	*t*	*df*	Sig. (2 Tailed)
Equal variances assumed	1.427	.233	3.349	1115.00	.001
Equal variances not assumed			2.890	105.33	.005

Model Summary Based on Father Presence and Free-and-Reduced Lunch Status

The fourth null hypothesis stated that attendance, discipline, fatherlessness, GPA, and gender do not serve as predictors for academic achievement for students eligible for free-and-reduced price lunches. The assumptions of multiple regression analysis were studied to ensure the results were valid.

Independence of residuals were tested using Durbin-Watson test. Durbin-Watson testing ensured there was no correlation between the residuals within the model. "The test statistic can have values ranging from 0 – 4 with a value of 2 meaning that the residuals are uncorrelated" (Field, 2009, p. 785). In order for the assumption to be met, the value must be around 2 (Field, 2009). The closer the value is to 2 the less of a correlation there is between the residuals. The Durbin-Watson test had a value of 1.82. Therefore, the assumption was met.

The second assumption tested linearity. Linearity seeks to ensure that both collectively and individually that each of the predictor variables within the model is linearly related to the criterion variable (Field, 2009). A collective linear relationship was examined by plotting the standardized residuals versus the unstandardized predicted values. A linear relationship between

each of the predictor variables and the criterion variable can be determined by looking at the partial regression plots for each of the predictor variables, but categorical variables are not examined. For the assumption to be met, the residuals must form a horizontal band indicating a linear relationship between the collective predictor variables and the criterion variable. This occurs when the partial regression plots demonstrate a linear pattern. The partial regression plots showed a linear relationship so the assumption was met.

Homoscedasticity seeks to ensure that the residuals are equal for all predicted values of the criterion variable (Field, 2009). The assumption used the plot of standardized residuals versus the unstandardized predicted values and was met when the plot did not show evidence of a residual spread increasing or decreasing as the predicted value of the criterion variable increased. The plot did not show evidence of spreading. Therefore, the assumption was met. As well, multicollinearity helps ensure that the predictor variables are not too heavily correlated. Assumption is met when tolerance levels for each of the predictor variables are above the recommended .2 level (Field, 2009). No multicollinearity was found because the predictor variables were above 0.2 level, therefore, the assumption was met.

The detection of outliers helped determine and ensure there is not a data point that falls outside the typical pattern of points and is met when no standardized residual falls outside of +/- 1.5 standard deviations (Field, 2009). There was no evidence of an outlier present as all residuals fell within +/- 1.5 standard deviations. Normality of residuals seeks to ensure that the residuals within the model are normally distributed. The assumption of normality of residuals was tested by examining the *p-p* plot and the residuals were aligned with the diagonal line on the plot. This indicated a normal distribution, therefore, the assumption was met.

R (.802) was the multiple correlation coefficient, which describes the strength of the relationship between the predictor variables and the criterion variable (Field, 2009). Next, R^2 (.644) was the multiple coefficient of determination, which described how much variance is in the criterion variable (Field, 2009). Furthermore, 64.4% of the variance in academic achievement was explained by the collection of predictor variables. When adjusted for sample size and number of predictors, the adjusted R^2 showed that the variance explained in the criterion variable by the predictor variables was 63.7%. The standard error of the estimate (.38), within this inferential test, told the average residual distance of each data point from the regression line.

The multiple regression test determines if one or more of the predictors serves as a significant predicator of the academic achievement. There were two significant predicators found within the multiple regression test. This was evident by having a significant result, $F(5, 263) = 95.11$, $p < .001$. To determine which predicator variable was significant, examination of the coefficient outputs were conducted. There was a significant relationship among two predictors, GPA and discipline, thus, the fourth null hypothesis was rejected.

GPA had an unstandardized partial regression coefficient of .576, which meant academic achievement was predicted to change .576 with a one-unit increase in GPA, while removing the effects of the other predictors. Discipline had an unstandardized partial regression coefficient of .014, which meant academic achievement is predicted to change .014 with a one-unit increase in discipline, while removing the effects of the other predictors.

The standardized partial regression coefficients (β weight) for each predictor allowed for the measure of impact of each test on academic achievement in standardized units through the use of *z* scores. GPA had a standardized partial regression coefficient (β weight) of .829, and discipline had a standardized partial regression coefficient (β weight) of .090. This illustrated the

amount of impact each variable had regarding the prediction of academic achievement. Based on the data contained in Table 9, discipline and GPA were significant predictors for academic achievement.

Table 9

Partial Regression Coefficients

Model	*B*	*SE* of the Estimate	β	*t*	Sig.
GPA	.576	.029	.829	20.17	.000
Discipline	.014	.006	.090	2.27	.024

Model Summary Based on Father Presence and Paid Lunch Status

The fifth null hypothesis stated that attendance, discipline, fatherlessness, GPA, and gender do not serve as predictors for academic achievement for students not eligible for free-and-reduced price lunches. The assumptions of multiple regression analysis were studied to ensure the results were valid.

Independence of residuals was tested again using Durbin-Watson on the fifth null hypothesis. Durbin-Watson testing ensures there is no correlation between the residuals within the model. The Durbin-Watson test had a value of 1.68, therefore, the assumption was met.

The second assumption determined linearity. A collective linear relationship was examined by plotting the standardized residuals versus the unstandardized predicted values. A linear relationship between each of the predictor variables and the criterion variable was determined by looking at the partial regression plots for each of the predictor variables, but categorical variables were not examined. For the assumption to be met, the residuals must form

a horizontal band indicating a linear relationship between the collective predictor variables and the criterion variable. This occurred when the partial regression plots demonstrated a linear pattern. The partial regression plots showed a linear relationship, therefore, the assumption was met.

Homoscedasticity was also reviewed to ensure that the residuals are equal for all predicted values of the criterion variable (Field, 2009). The assumption used the plot of standardized residuals versus the unstandardized predicted values and was met when a plot did not show evidence of the residual spread increasing or decreasing as the predicted value of the criterion variable increased. The plot did not show evidence of spreading. Therefore, the assumption was met. As well, multicollinearity was reviewed to ensure that the predictor variables were not too heavily correlated. No multicollinearity was found because the predictor variables were above 0.2 level, therefore, the assumption was met.

The detection of outliers helped determine and ensure there is not a data point that falls outside the typical pattern of points and is met when no standardized residual falls outside of +/- 1.5 standard deviations (Field, 2009). There was no evidence of an outlier present as all residuals fell within +/- 1.5 standard deviations. The assumption of normality of residuals was tested by examining the *p-p* plot. Residuals were aligned with the diagonal line on the plot. This indicated a normal distribution, therefore, the assumption was met.

R (.844) was the multiple correlation coefficient which described the strength of the relationship between the predictor variables and the criterion variable (Field, 2009). Next, R^2 (.713) was the multiple coefficient of determination, which described how much variance was in the criterion variable and that 71.3% for the variance in academic achievement was explained by the collection of predictor variables. The adjusted R^2 value of .710 indicated that the variance

explained in the criterion variable by the predictor variables was 71.0%. The standard error of the estimate (.38) within this inferential test told the average residual distance which was the average residual distance each data point was from the regression line.

The multiple regression test determined if one or more of the predictors served as a significant predicator of the academic achievement. All five of the predicators were found to be significant within the multiple regression test. This was evident by having a significant result, $F(5, 509) = 252.72$, $p < .001$. To determine which predicator variable was significant, examination of the coefficient outputs were needed. There was a significant relationship among all five predictors, thus, the fifth null hypothesis was rejected.

GPA had an unstandardized partial regression coefficient of .625, which meant academic achievement was predicted to change .625 with a one-unit increase in GPA, while removing the effects of the other predictors. Gender had an unstandardized partial regression coefficient of .121, which meant academic achievement was predicted to change .121 with a one-unit increase in gender, while removing the effects of the other predictors. Discipline had an unstandardized partial regression coefficient of .006, which meant academic achievement was predicted to change .006 with a one-unit increase in discipline, while removing the effects of the other predictors. Attendance had an unstandardized partial regression coefficient of .004, which meant academic achievement was predicted to change .004 with a one-unit increase in attendance, while removing the effects of the other predictors. Father presence had an unstandardized partial regression coefficient of .576, which meant academic achievement was predicted to change .576 with a one-unit increase in father presence, while removing the effects of the other predictors.

The standardized partial regression coefficients (β weight) for each predictor (test) allowed me to measure the impact of each test on academic achievement in standardized units

through the use of *z* scores. GPA had a standardized partial regression coefficients (β weight) of .876, gender had a standardized partial regression coefficients (β weight) of .086, discipline had a standardized partial regression coefficients (β weight) of .064, attendance had a standardized partial regression coefficients (β weight) of .063 and father had a standardized partial regression coefficients (β weight) of .053. This showed me the amount of impact each variable had regarding the prediction of academic achievement. Based on the data contained in Table 10, all five variables are significant predictors for academic achievement.

Table 10

Partial Regression Coefficients

Model	*B*	*SE*	β	*t*	Sig.
GPA_*z* score	.121	.034	.086	3.562	.000
Gender	.121	.034	.086	3.562	.000
Discipline	.006	.002	.064	2.600	.010
Attendance	.004	.001	.063	2.612	.009
Father	.124	.056	.053	2.209	.028

a. Lunch_Status = Paid; b. Dependent Variable: Acad_Ach

Summary

Throughout this chapter, quantitative data were used to find answers to the six research questions found in this study. Research Question 1 ($H_0 1$) evidenced that there were no differences on the proportions between fatherless homes and homes with fathers based on the socioeconomic status of the students. Research Question 2 evidenced the Pearson chi-square test indicated a significant difference in the expected and actual counts within the two-by-two design.

Specifically, the Pearson chi-square test was selected to determine goodness of fit and examined whether the distribution was higher in one group than expected.

Research Question 3 ($H_0$2) revealed there was a significant difference on academic achievement based on current father situation for students eligible for free-and-reduced price lunches. Students who had fathers in the homes regardless of socioeconomic status scored higher on Indiana (ECA English/Language arts and Algebra I) tests, college admission standardized tests, ACT, SAT, PSAT, and had a higher attendance rate compared to students who did not have fathers present in the homes.

Research Question 4 ($H_0$3) revealed there was a significant difference on academic achievement based on current father situation for students not eligible for free-and-reduced price lunches. Students who did not have fathers in the homes regardless of socioeconomic status scored lower on Indiana ECA (English/Language arts and Algebra I) tests, college admission standardized tests, ACT, SAT, PSAT, but had a lower attendance rate compared to students who had fathers present in the home.

Multiple regression was used for Research Questions 5 and 6. Research Question 5 ($H_0$4) demonstrated that attendance, fatherlessness, and gender did not serve as predictors for academic achievement for students eligible for free-and-reduced price lunches. However, the two predictors that were significant predictors for academic achievement were discipline and GPA. Research Question 6 ($H_0$4) demonstrated that attendance, discipline, fatherlessness, GPA, and gender do serve as predictors for academic achievement for students not eligible for free-and-reduced price lunches.

In addition, the process of documenting and using results within schools, as well as family communications and relationships showed positive relationships to raising assessment

scores and improved discipline and attendance. Children who live in households that have both biological parents demonstrated higher levels of parental involvement in the children's education compared to children who lived in mother-only families or step-families (Zill & Nord, 1994). This provides an opportunity for scholars and other thought leaders on this topic to influence public policy by contributing new knowledge about the factors associated with academic achievement and offer next-step interventions that "promote training, education, and advocacy programs which support single parents and their children" (Barajas, 2012, p. 19).

CHAPTER 5

DISCUSSION OF FINDINGS, LIMITATIONS AND IMPLICATIONS

For this study, an analysis was conducted to have a better understanding if children are impacted educationally due to having fatherless homes. A child needs physical and emotional involvement from a father, whether a biological father, father figure, or a step-father; it is crucial to a child's learning and social development (Blankenhorn, 1996). Data were collected from different schools throughout the state of Indiana focusing on public schools that existed in urban, suburban, and rural areas. The study was significant in that it evidenced that fatherless children are impacted educationally regardless of race, sex, class, or social status. This chapter, through its discussion of findings, will illuminate specific characteristics that are inherent in the success of a student who experiences fatherlessness.

This study focused on student behaviors, academics, and the effects of the male role model. Further, the results may help guide and provide an understanding of how fatherless homes impact society through a better understanding of educational impact. More specifically, it is hoped the study findings allow parents and schools to create a better understanding of how to change the long term effects for these children by understanding the importance of fathers in children's lives.

The final chapter is divided into three major sections. The first section provides a discussion of findings, which summarizes the study and reviews the results presented in Chapter

4. The second section describes the study's limitations, which qualifies the findings of the study. The last section of Chapter 5 focuses on implications for future research and suggestions for future studies regarding this topic.

Discussion of Findings

The study findings are organized across four sections. The first section contains differential data and consists of three subsections. The second section describes the findings from the inferential data. There were six research questions that were answered. Research Questions 1 and 2 were answered in the descriptive section because it required data in the form of means, standard deviations, frequencies, percentages and *z*-scores. The third section, limitations, describes the potential errors that could have taken place that may have affected the results. The last section is implications and is broken into two subsections.

Father Status

The first portion of this section provides descriptive data for Research Question 1 and 2 by comparing the results for students who reported fathers living in the home or not living in the home. Students who did not have fathers in the home had lower test scores compared to students who had fathers present in the home. Research suggested that father-absent children who "graduate from high school and pursue post-secondary educational opportunities at a much lower rate" (Sigle-Rushton & McLanahan, 2004, p. 10), do not perform as well on standardized tests (Bain et al., 1983), and are more likely to experiment with drugs and engage in teen-risk behaviors (Mandara & Murray, 2006) than children's homes in which fathers are present.

The SAT data for students with fathers in the homes scored higher on average than students without fathers in the homes. The SAT is an important part of the college application process and helps determine whether or not a student is accepted into college. For example, a

2001 U.S. Department of Education study suggested "that highly involved biological fathers had children who were 43 percent more likely than other children to earn a bachelor's degree" (as cited in Rosenberg & Wilcox, 2006, para. 7). The data suggested that students who have fathers living in the homes have a 5% greater chance of being accepted into college than students who does not have fathers living in the homes. Students who live in two-parent families are 80% more likely to attend a post-secondary institution compared to students who live in single-parent homes (Kelly & Wallerstein, 2008).

Another outcome of this study indicated higher achievement scores (i.e., English 10) among students with fathers in the home. ECAs are defined by the state of Indiana as "criterion-referenced assessments developed specifically for students completing their instruction in Algebra I, Biology I, or English 10" (IDOE, 2011, p. 1). The English 10 ECA test consists of reading comprehension, writing, language skills, grammar, and usage (IDOE, 2011). Based on the data, students who had fathers in the homes scored approximately 16 (4%) points higher than students who did not have fathers in the homes. The data suggested that students who have fathers in the homes have a slightly higher chance of having increased test scores on the English 10 ECA compared to students without fathers in the homes. Fatherless homes, do affect children from an academic standpoint, which contributes to future success (Thomes, 1968).

This is an important factor for students especially during the children's adolescent years. In 1996 Blankenhorn wrote, "A generation ago, an American child could reasonably expect to grow up with his or her father. Today, an American child can reasonably expect not to" (p. 1). The importance of a parent reading to a child at an early age is a basic foundation for academics and can allow them to perform lower in several aspects of their life. "Approximately, 61 percent of three- to five-year olds living with two parents were read aloud to everyday by a family

member, compared to 48 percent of children living in single- or no-parent families" (Federal Interagency Forum on Child and Family Statistics, 2003, para. 1).

Gender

This section focuses on the descriptive data that emphasized gender. Male students scored higher on the SAT tests than female students did. Other test scores were slightly higher as well. Being retained "one grade increases the risk of dropping out later by 40 to 50 percent, two grades by 90 percent" (Larson, 2012, para. 10). "Adolescent girls who reported higher levels of relationship quality with their fathers were less likely to have sex before age 16, compared with adolescent girls who reported lower levels of father-daughter relationship quality" (Ikramullah et al., 2009, p. 4).

The data suggested that boys without fathers have higher test scores than girls without fathers. The scores show only a slight change, but the single parents cannot afford even the slightest risk of their daughters failing in school or becoming sexually active. Girls have a greater possibility of becoming sexually active at an earlier age when fathers are not present. In a study, it was determined that women without a strong father figure became sexually active as a teenager and noted that the lack of a father figure was a determining factor in their sexual drive at an early age (Burn, 2008).

The influence of gender appears to have an effect on academic performance. However, Alika and Edosa (2012) made note of Fausto-Sterling (1995) and Friedman (1985) "suggesting there is no significant difference in cognitive ability between males and females" (para. 4). However, this study suggested that boys outperform girls on state and federal tests required by schools, regardless of the parent situation.

"Adolescent boys who had dinner with their family every day were less likely to have had sex before age 16, compared with those who report they eat dinner with their family less than five nights a week" (Ikramullah et al., 2009, p. 4). Additionally, children are "twice as likely to drop out of high school, 2.5 times as likely to become teen mothers, and 1.4 times as likely to be idle—out of school and out of work—as are children who grow up with both parents" (McLanahan, 2001, para. 6).

Lunch Status

The last section describes the socioeconomic status data. This section reflects the largest change in tests scores based on lunch status. The data provided evidence there was a significant difference in test scores between students who are of paid lunch status versus students who are of free and reduced lunch status. The data shows that students have a 35.5% higher possibility of being labeled as free and reduced lunch status. Children in fatherless homes are affected by four items—mental health, academics, behavior, and poverty (Ray, 2013).

Students who are of paid-lunch status, regardless of their fathers' presence, scored considerably higher on tests than students who are of free-and-reduced lunch status. The SAT test has the highest increase when lunch status was compared. Males, on average, scored higher on the SAT compared to females. Males had an average score 201.98 points higher than females. There is a significant test point spread between the two genders. Based on the gender data, male students have a greater chance (13%) of obtaining increased test scores on the SAT.

This suggests that male students have an advantage over female students of entering college and obtaining a college degree. Several studies have tried to prove if gender influences academic performance on children who come from single-parent homes. A study performed by Alika and Edosa (2012) "investigated the relationship between broken homes and academic

achievement of students" (p. 7). Their studies helped provide information that helps close the gap on understanding if gender makes a difference on test scores.

The data also suggests that students who are of low socioeconomic status have a three percent greater chance of not having fathers in the homes. Sowers (2010) "explained how rejection is the defining characteristic of the fatherless generation. In the United States alone, over 33 percent of just over 25 million children are fatherless and searching for Dad. They are searching for his love and acceptance" (p. 19). Duncan et al. (1994) discovered that children who are reared by single mothers are less cooperative, and these children have lower tests scores for intelligence than children reared by biological parents.

Inferential Findings

Inferential data were also utilized for Research Question 3. The data for Research Question 3 determined that students who were of free and reduced lunch status were being affected based on academic achievement regardless of the father situations. Several factors encourage a child's academic achievement or contribute to a child's poor school performance. Children who stem from families that have absent parents and who are emotionally distant, preoccupied, or have parents that have unethical moral, the learning of moral values by children are greatly hindered (Popenoe, 1998). Additionally, it was found that "children reared by a divorced or never-married mother are less cooperative and score lower on tests of intelligence than children reared in intact families" (Duncan et al., 1994, p. 26). Regardless of the type of father, the involvement and the amount of time spent with the child must be meaningful and genuine. Krampe (2009) found in her study that "from the offspring's perspective, the central feature of the instrumental father is the teaching, mentoring male parent" (p. 891). Father involvement and its effect on academics, extracurricular participation, overall educational

satisfaction, and exclusion, had implications "for both two-parent and single-parent households and was distinct and independent from the effect of mother involvement" (Nord, 1998b, p. 2).

Inferential data were utilized for Research Question 4. The data for Research Question 4 determined that students who were of paid lunch status were not being affected based on academic achievement regardless of the father situations. When fathers are involved at an early age, toddlers have the ability "to start school with higher levels of academic readiness, are more patient and can handle the stresses and frustrations associated with school more readily [learned] than children with less involved fathers" (Pruett, 2000). "A 2001 U.S. Department of Education study found that highly involved, biological fathers had children who were 43 percent more likely than other children to earn" (Rosenberg & Wilcox, 2006, para. 4) a bachelor's degree. As well, they were "33 percent less likely than other children to repeat a grade" (Rosenberg & Wilcox, 2006, para. 4). In an executive summary by Henderson (2010), responsibility has to be shared with the parents for children to have a successful education; "The evidence is clear—schools cannot close the achievement gap without partnering with families" (Henderson, 2010, p. 1).

Multiple regression was used for Research Question 5 to determine if the five predictor variables (i.e., attendance, discipline, fatherlessness, GPA, and gender) served as a significant predictor for academic achievement based on students who were of free and reduced lunch status. Based on the data there were only two variables found to have an impact on academic achievement for these students. The two variables were GPA and discipline.

A student's GPA impacts student achievement because as the student GPA increases so does the academic achievement. Fathers who help their children "with reading or homework do significantly better academically than those children whose fathers do not" (Cooksey & Fondell,

1996, p. 702). In fact, "children living in single-parent homes or in step-families report lower educational expectations on the part of their parents, less parental monitoring of school work, and less overall social supervision than children from intact families" (Astone & McLanahan, 1991, para. 5).

From a discipline standpoint, students who are of free-and-reduced lunch status have higher discipline rates which directly affects academic achievement. In some cases, students are disciplined, but it affects their academic achievement in a positive manner (Rosenberg and Wilcox, 2006). According to Rosenberg and Wilcox (2006), students who live in fatherless homes have behavior problems in and out of school. Children without fathers are not guided or directed to learn what good behaviors are; therefore, they misbehave because they do not know correct behaviors (Baumgardner, 2011).

Since discipline was a significant predictor, it suggests that students who were sent to the office for discipline issues were resolved and the unwanted behaviors were corrected. Children who live without a father or a stepfather exhibit more problems with behavior, in achieving goals and are less likely to socialize with other students who are not a discipline problem (Sandefur et al., 1992). In 2008, "U.S. law enforcement agencies made an estimated 2.11 million arrests of young people under the age of 18" (Puzzanchera, 2009, p. 1). "Nationally, 15.3 percent of children living with a never-married mother and 10.7 percent of children living with a divorced mother have been [excluded] from school, compared to only 4.4 percent of children living with both biological parents" (Dawson, 1991, p. 579).

Multiple regression was utilized for Research Question 6 to determine if the five predictor variables (i.e., attendance, discipline, fatherlessness, GPA, and gender) serve as a significant predictor for academic achievement based on students who were of paid lunch status.

Based on the data, all five variables were found to have an impact on academic achievement. The descriptive section provided evidence that attendance for students who are of free-and-reduced status showed a higher attendance rate than students who were of paid lunch. Barrington and Hendricks (1989) reported connections between measures of academic performance in early elementary school and poor attendance and dropout behavior before high school graduation. Students who have an attendance problem have a higher probability of getting into trouble with the law and cause problems within their communities (Great Schools Staff, 2015).

In addition, analysis of National Testing Data shows that "students who miss more school than their peers consistently score lower on standardized tests, no matter their age, demographic group, or state or city" (Fariña, 2015, para. 2). Students who miss school are most likely missing due to doctors' appointments, family functions, or other absence approved by their parents. However, revealing these research results, it must be noted that I presented only one avenue of study regarding the attendance and not the reasons for absences. The attendance rate is in direct correlation with academic achievement because students succeed in academics when they attend school on a regular basis (Great Schools Staff, 2015).

Discipline was the next variable that impacted academic achievement. Children with involved, caring fathers have better educational outcomes (Allen & Daly, 2007). They have a higher or an increased chance of becoming successful educationally because they were guided, directed, and mentored to act or conduct themselves accordingly (Schroeder et al., 2010). The data showed that academic achievement increased for both paid lunch and free and reduced lunch students based on discipline. This data does not indicate that a student's academic achievement will always increase. The data retrieved from schools was collected from seniors,

which signifies students could have discipline issues starting as early as their freshman year. If schools are managing discipline effectively, students should see an improvement by their senior year. The results of a well-managed discipline system should show an improvement in academics success (Bear, 2010). This suggests that a student who was sent to the office for a discipline issue was resolved and the unwanted behavior was corrected.

According to Rosenberg and Wilcox (2006), students who live in fatherless homes have behavior problems in and out of school. Children without fathers are not guided or directed to learn what good behaviors are; therefore, they misbehave because they do not know correct behaviors (Baumgardner, 2011). Children who live without a father or a stepfather exhibit more problems with behavior, in achieving goals and are less likely to socialize with other students who are not a discipline problem (Sandefur et al., 1992).

Children need their fathers as a mentor for guidance, love, and social development. The U.S. Census Bureau (2011) shared that "there is a [father factor] in nearly all of the social issues facing America today" (p. 1). Fathers who help their children develop higher IQs, better linguistic abilities, and improved cognitive capacities when they are more playful with their children (Rosenberg & Wilcox, 2006). When fathers provide this mentoring their children will have a higher likelihood of performing better in school and being successful with their own families. "A child's well-being is affected more by their relationships with their parents, their parents' sense of competence and security, and the presence of social and economic support for the family than by the gender or sexual orientation of their parents" (Bever, 2014, para. 10). "There is no evidence that the sexual orientation of the mother influences parent–child interaction or the socioemotional development of the child" (MacCallum & Golombok, 2004, p. 1409).

Gender was also a contributing variable for academic achievement. More recently, a growing body of research regarding gender indicated that growing up with an absent father has an increased negative effect on a male in comparison to a girl (Mandara & Murray, 2006; Sigle-Rushton & McLanahan, 2004). In support of this evidence, the descriptive section of this chapter alluded to the differences in gender and the success of male students over female students. The father's presence in the home clearly has an impact on children. "The lack of a role model in the daily presence in the home is often thought to be at the root of many of society's problems, ranging from crime and drug abuse to poor academics and violence" (Ray, 2013, para. 3).

The last variable that impacted student achievement for paid lunch students is GPA scores. GPA scores also affected students who were of free and reduced lunch status. In both cases the results were very similar; therefore, the data and supporting evidence would be the same for both research questions. Another contributing factor to student achievement is the student's academic outcome. "About half of students living in single-parent families or stepfamilies have parents who are highly involved, and 62 percent of students living with both their parents have parents who are highly involved in their schools" (Nord & West, 2001, p. 19). It is crucial for both parents to be present and involved in the children's school in order for them to be successful. "Access to both parents seemed to be the most protective factor, in that it was associated with better academic adjustment . . . moreover, data revealed that noncustodial parents (mostly fathers) were very influential in their children's development" (Bisnaire et al., 1990, p. 74).

Limitations

The limitations of the study were those characteristics of design or methodology that impact or influence the application or interpretation of the results of the study. "They are the constraints on generalizability and utility of findings that are the result of the ways in which they chose to design the study and/or the method used to establish internal and external validity" (University of Southern California, 2014, para. 8). Bias of the researcher or participants could serve as its own limitation, including the researcher's or participants' personal experiences, "relation to case study data, perceptions, and gaps in memory of specific details. It is [my] responsibility to use a process that controls for and minimizes bias to the greatest extent possible" (University of Southern California, 2014, para. 8).

The possibility exists that the principals' and teachers' intentional or unintentional bias may have impacted the outcome of the data collected. Self-reported data contain several potential sources noted as limitations:

(a) Selective memory [remembering or not remembering experiences or events that occurred at some point in the past],

(b) Telescoping [recalling events that occurred at one time as if they occurred at another time,

(c) Attribution [the act of attributing positive events and outcomes to one's own agency but attributing negative events and outcomes to external forces], and

(d) Exaggeration [the act of representing outcomes or embellishing events as more significant than is actually suggested from other data]. (University of Southern California, 2014, para. 8)

This study does not account for race, ethnic background, and same sex marriages for participants. Fluency in a language also assists with accurate data collection.

As a researcher, it was my responsibility "to use a process that controls for and minimizes bias to the greatest extent possible" (University of Southern California, 2014, para. 8). "Quantitative methods involve the process of collecting, analyzing, interpreting, and writing the results of a study" (Creswell, 2014, p. 12). The value and accuracy of information and data were determined by the interpretation and fidelity of reporting by the individual principals or designees. Letters were sent to principals per building, informing principals how to collect, de-identify, and submit data to me for students in the 12th grade throughout the district. Complete data were not submitted in all cases and the study was also limited to the extent that principals or designees read and understood the directions. Additionally, only 240 public high schools were included from the state of Indiana limiting the ability to generalize results to other states. Of the 240 high schools only nine schools reported data. The accuracy of parents filling out the participation form online or in paper form could create a limitation based on the parent choosing not to report parent status.

Another limitation was the potential biases of the study participants, including personal experiences, perceptions, and the ability to report specific details. As principals or designees were providing test data, errors transposing this information could serve as a limiting factor too. Finally, this study was limited by not accounting for race or ethnic background.

Implications

Implications for Schools and Communities

Research suggests that the more competent the teacher the greater the positive impact the teacher will have on student achievement (Marzano & Waters, 2009). Schools have the capability to create an environment and culture where the demands of standardized testing and academic achievement are recognized and balanced with the needs of children. Schools, coupled with involved parents, contribute to the success the children have in school. To support this, students who live in single-parent families or stepfamilies are significantly less likely to have parent involvement in their children's school compared to students living in families that have both biological parents (Nord & West, 2001). This mentoring process and modeling is crucial to the students who are without father figures (Corneau, 1991).

Unfortunately, schools are not the only place in a student's life that is available to them and certainly not the only developmental influence. Involving families might keep the family together, therefore, promoting education in the school (Berliner, 2006). Attendance was a variable that improved student achievement. Parents who maintain an income from their jobs typically do not have an attendance problem with their children. Based on the data, attendance was a key factor in academic achievement. Attendance is just one form of modeling that parents can give to their children to help them become successful. This mentoring process and modeling is crucial to the students who are without father figures (Corneau, 1991).

Programs need to be established to promote and support single-parent families and address school absenteeism. This type of support system could benefit the students, families, schools, and community in general. If a stronger relationship was established between the community and school, truancies and absenteeism have the potential to decrease. For example,

the more involved a parent is the more likely the parent will be better educated and promote the importance of education (Urban & Wagoner, 2009). It is also possible that by improving the socioeconomic status through counseling and guidance for single-parents, schools may have an indirect positive effect on students' learning (Ray, 2013). To further support this, children have the ability to learn moral values from their families by relying on parents to be role models (Blankenhorn, 1996).

Educators also have an influential impact on student achievement. Educators can help students develop self-discipline which helps to create and maintain safe, orderly, and positive learning environments (Bear, 2010). The data suggest that discipline was an important factor in order to promote academic success. Students who develop the self-discipline while in school will see success in and out of the classroom (Ray, 2013).

Co-parenting is a challenging, but crucial ingredient for parents during separation or divorce. Children need help working through the situation and be afforded ample opportunity to understand the changes that now face them. Co-parenting requires both parents to contribute to a healthy relationship that is child-centered, minimizing the influence of the separation or divorce (Block & Smith, 2014). Doing so contributes greatly to the child's development of parenting skills and social skills that are required for current and future relationships (McBride et al., 2005). These relationships are then supported and further developed in school.

Schools continue to provided and promote programs to increase parent involvement because greater parent involvement will improve student achievement, increase attendance, increase social skills, and decrease discipline issues (Smith, Wohlstetter, Kuzin, & Pedro, 2011). Representative programs that include parents include, school wrap-around support systems, parent teacher organizations (PTO), booster clubs, classroom volunteers, and parent involvement

opportunities in before- and after-school programs. As Lee and Bowen (2006) noted, parent involvement is critical to the success of a child's academic outcomes in the school. Parents who are involved in their child's education will increase their child's odds of having better social skills, behavioral skills and overall academic success (Smith et al., 2011).

Children have the capacity to learn moral values from their families and by relying on parents to be role models (Blankenhorn, 1996). Unfortunately, some children do not have the luxury of having parents as a role model. Schools are a place for teachers, counselors, and administrators to serve as role models and mentors for students. This mentoring process and modeling is crucial to the students who are without father figures (Corneau, 1991). Research conducted by Tolan, Henry, Schoeny, and Bass (2008) determined that modeling is a key intervention point when considering the success of a student from a behavioral and academic standpoint.

Although parental support is needed, so is marital and social modeling. Children benefit from support and modeling from both parents. Single parent children "are significantly more likely to engage in early sexual activity, abuse drugs, and experience conduct and mood disorders. This effect is especially strong for children whose parents separated when they were five years-old or younger" (Fergusson et al., 1994, p. 944). Additionally, "sons and daughters of divorced or separated parents exhibited significantly more conduct problems compared to children who are living with both biological parents" (Amato, 2005, p. 3).

One factor inherent in many children is resiliency. The Brody et al. (2002) study also found, based on resiliency that several children experienced many discrete and chronic stressors; however, these children did not fall victim to failure. Instead, these children were found to have a relationship with their parents and had other adult relationships with people who were

supportive, created a positive environment, and involved in their lives. From an education perspective, students who experience a positive and safe classroom environment have a much lesser chance of experiencing failure (Brody et al., 2002).

Creating programs focused on improved school culture for school staff is frequently considered when school scores are in a downward trend across a variety of effectiveness metrics (e.g., discipline, achievement). School leaders build relationships with teachers to better understand their ideas, seek input, engage staff in decision-making, and trust the professional judgment of the staff. To further support this, leaders reinforce the sharing of ideas and effective practices among all staff (Gruenert & Valentine, 1998). School culture is vital to the professional development of staff and especially teachers. Creating school-wide programs that involve teachers and school leaders are proven to increase student achievement (Tilley, Smith, & Claxton, 2012). A portion of this professional development should include providing teachers and school leaders with tools that allow them to recognize students who come from single parent homes or broken homes. Additional supports should be available to teachers and school leaders for the needs of these students. Ultimately, teachers who collaborate and work together with their school leaders will have success in building relationships and can ultimately change the culture (Miller, Goddard, Goddard, Larsen, & Jacob, 2010).

Implications for Future Research

A recommendation for future research would be to increase the number of students participating in the study. A larger number of participants may strengthen the analysis of whether or not family structure has a direct or indirect effect on student academic success, attendance, and discipline rates. To further this study topic, it is recommended that this study be expanded beyond the state of Indiana and include private and non-accredited schools.

To further this study, it is recommended that school districts create a system within their student information system to allow for the collection of attendance data, discipline data, parent status data, student gender data, and socioeconomic status data. The data system would begin when a student is enrolled in the first grade and monitored through the 12th grade, assuming the student remains in the district. This type of system would allow students to be identified and would alert administrators and guidance counselors when students approach or met low academic achievement.

Since socioeconomic status served as an indicator of student achievement in this study, and much research supports the influence of building leadership on student achievement (Waters & Grubb, 2004), it is recommended that a study be conducted to better understand instructional characteristics among principals in high- and low-performing schools in low socioeconomic areas.

It is also recommended that a study regarding professional development for improved instructional practices can be conducted in which administration, faculty, and staff are included. This study would then explore the impact on student achievement based on fatherlessness and socioeconomic status in comparison to the whole school before and after the professional development.

Co-parenting is a challenging, but crucial ingredient for parents during separation or divorce. Children need help working through the situation and be afforded ample opportunity to understand the changes that now face them. Co-parenting requires both parents to contribute to a healthy relationship that is child-centered. A recommendation for future study would be to create a qualitative study that provides deeper understanding of co-parenting and the effects on student academics.

Schools continue to provided and promote programs to increase parent involvement because greater parent involvement will improve student achievement, increase attendance, increase social skills, and decrease discipline issues. A future study recommendation is to study parent involvement programs as well as other involvement opportunities based on socioeconomic status to better understand if positive gains are made in the child's education, as well as improved social skills, behavioral skills and academic success.

Children have the capacity to learn moral values from their families and by relying on parents to be role models. Schools are a place for teachers, counselors, and administrators to serve as role models and mentors for students. This mentoring process and modeling is crucial to the students who are without father figures. A future research recommendation is to better understand modeling and mentoring in the school setting as a key intervention point when considering the success of a student from a behavioral and academic standpoint.

One factor inherent in many children is resiliency. Several children experienced many discrete and chronic stressors; however, these children did not fall victim to failure. Instead, these children were found to have a relationship with their parents and had other adult relationships with people who were supportive, created a positive environment, and involved in their lives. A future research recommendation is to conduct a qualitative study to more deeply understand if resiliency impacts students regardless of socioeconomic status, father status, race, or ethnicity.

Creating programs focused on improved school culture for school staff is frequently considered when school scores are in a downward trend across a variety of effectiveness metrics (e.g., discipline, achievement). School leaders build relationships with teachers to better understand their ideas, seek input, engage staff in decision-making, and trust the professional

judgment of the staff. A future research recommendation includes determining if creating school programs that involve teachers and school leaders will increase student achievement. In particular, better understanding which tools allow them to recognize students who come from single parent homes or broken homes and which programs best address this issue would prove beneficial.

Finally, it is recommended that a study be conducted on incoming freshmen using similar variables as this study. Once the freshmen are identified as a cohort, track each student across the state of Indiana based on STN if mobility occurs. After the fourth year of schooling and those eligible students in the cohort graduate, the data from each student could be aggregated and analyzed. This would provide a more accurate understanding of student achievement in relationship to fatherlessness and socioeconomic status than a one-year snapshot.

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APPENDIX A: COVER LETTER TO PRINICPALS

Fatherless Homes and Implications on Student Achievement

Principals,

You are being invited to participate in a research study concerning students who live in fatherless homes and the implications it has on student achievement. This study is being conducted by Tim Garland under the guidance of Dissertation Chairperson Dr. Brad Balch, from the Department of Educational Leadership at Indiana State University. The study is being conducted as part of a dissertation.

We expect that any risks, discomforts, or inconveniences will be minor and we believe that they are not likely to happen. If discomforts become a problem, you may discontinue your participation. There are no costs to you or the school for participating in the study. The information you provide will examine if there is a strong relationship between fatherless homes and student achievement. The process of retrieving the data will take approximately 45 to 60 minutes to complete. This information collected is similar to the data that is required for state reports. The information collected may not benefit you directly, but the information learned in this study should provide more general benefits to school administrators and parents.

Confidentiality will be maintained as only the researcher and/or dissertation committee will have access to the names of participating schools and principals. Anonymity of students will be assured, in that the information will be de-identified by the school prior to its being sent to the researcher. The information collected will be stored securely and confidentially on a laptop computer that is password protected. Individuals from the Institutional Review Board may inspect these records. Should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary. The data collection will require access to the schools current student information system. By completing you are voluntarily agreeing to participate. If you have any questions about the study, please contact Tim Garland, 5394 South 600 East, Walton, IN. 46994 phone: (765) 438–9599, e-mail: tgarland@tccs.k12.in.us or Dr. Brad Balch, Indiana State University, Terre Haute, phone: (812) 237–2802, e-mail: brad.balch@indstate.edu.

If you have any questions about your rights as a research subject or if you feel you've been placed at risk, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indiana State University, Office of Sponsored Programs, Terre Haute, IN, 47809, by phone at (812) 237–8217, or by e-mail at irb@indstate.edu.

APPENDIX B: DATA COLLECTION

Fatherless Homes and Implications on Student Achievement

Instruction Booklet for Data Collection

Sent to Principals

For questions call Tim Garland, 5394 South 600 East, Walton, IN. 46994 phone: (765) 438–9599, e-mail: tgarland@tccs.k12.in.us or Dr. Brad Balch, Indiana State University, Terre Haute, phone: (812) 237–2802, e-mail: brad.balch@indstate.edu.

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Purpose

The purpose of this data collection is to gather information on students in the twelfth grade. The data that will be extracted is similar to the data that is used for federal and state reporting for the state of Indiana. Count all students served or eligible to attend your school. This information is used for federal and state reporting. The data collection will require access to the schools current student information system.

Confidentiality will be maintained, as the researcher and potentially the dissertation committee will be the only ones that will have access to any information that would identify the school or participating principal. As well, this information will be kept on a laptop computer that is password protected. We will be collecting student names in any of the information we obtain from you for this study or in any of the research reports. Individuals from the Institutional Review Board may inspect these records. Should the data be published, no individual information or names of participating schools or principals will be disclosed.

If you have any questions concerning the retraction of data, please contact Tim Garland, 5394 South 600 East, Walton, IN. 46994 phone: (765) 438–9599, e-mail: tgarland@tccs.k12.in.us. If you have any questions about your rights as a research subject or if you feel you've been placed at risk, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indiana State University, Office of Sponsored Programs, Terre Haute, IN, 47809, by phone at (812) 237–8217, or by e-mail at irb@indstate.edu.

Instructions

If you decide to participate in this study, please follow the data collection process, as it is extremely important that consistently presented data are obtained, so that accurate statistical analysis can take place. In particular, please note that on the data collection instrument, all fields must be filled, and most importantly, the STN must be removed prior to sending data. The data collection will require your (or your designee's) access to the school's current student information system. Once you have collected the data requested, please return it to Tim Garland via e-mail tgarland@tccs.k12.in.us. Principals may also use other electronic means that have been agreed to prior to the data collection process.

The purpose of this data collection is to gather information on students in the twelfth grade. The data that will be extracted is similar to the data that is used for federal and state reporting for the state of Indiana. Retrieve data for all students who are served or eligible to attend your school. This information is used for federal and state reporting.

The process of retrieving the data will take approximately 60 to 90 minutes to complete. The information collected may not benefit you directly, but the information learned in this study should provide more general benefits to school administrators and parents.

Data Layout

Field	Fieldname	Length	Data Field Specification	Notes
1	School Number	4	State–Assigned School ID	School building number
2	Scholastic Aptitude Test (SAT)	4	Most recent score recorded in the student information system.	
3	Number of students in grade 12	5	Use most recent data.	This will help determine if the school is rural, sub-urban or urban
4	Academic College Testing (ACT)	2	Most recent score recorded in the student information system	
5	Algebra I ECA	3	Most recent score recorded in the student information system.	As defined by the state of Indiana
6	Eng/LA ECA	3	Most recent score recorded in the student information system.	As defined by the state of Indiana
7	Pre–Scholastic Aptitude Test (PSAT)	3	Most recent score recorded in the student information system.	As defined by the state of Indiana
8	Grade Point Average (GPA)	4	Students current GPA	GPA must be completed regardless of grading scale
9	Grading Scale	4	Grading scale	Use current grading scale i.e.: 4.00 4.30 5.00 12.0

Field	Fieldname	Length	Data Field Specification	Notes
10	Discipline	3	The number of reported incidents for office discipline	
11	Attendance	2	The number of days absent from school	
12	Father listed	1	Father listed = Y Father not listed = N	Only record data if a father is listed
13	Free-and-reduced Lunch	1	Does the student receive free and reduced Lunch Services Allowable Codes are: Yes = 1 / No =2	Free-and-reduced Lunch As defined by the state of Indiana

Example Data File Formats

The following section contains example data files in the allowed comma–delimited, and XML formats.

XML Format

School Number	ACT Score	SAT Score	Eng/ LA ECA	Alg.I ECA	PSAT Score	GPA	Grading scale	Gender	Discipline	Attendance	Father	Free/ Reduce Lunch
7935	4	1350	550	560	70	3.10	4.00	1	11	5	Y	Y

Comma Delimited Format

7935 24,1350,550,560,70,3.10,3.10,4.00,1,11,5,Y,Y

APPENDIX C: CONSENT FORM

Fatherless Homes and Implications on Student Achievement

Principals,

You are being invited to participate in a research study concerning students who live in from fatherless homes and the implications it has on student achievement. This study is being conducted by Tim Garland under the guidance of Dissertation Chairperson Dr. Brad Balch, from the Department of Educational Leadership at Indiana State University. The study is being conducted as part of a dissertation.

Your participation in this study is entirely voluntary. You should read the information below and ask questions about anything you do not understand, before deciding whether or not to participate. You are being asked to participate in this study because you are a principal in an Indiana public school who is not a charter or private school.

- PURPOSE OF THE STUDY

The purpose of this study is to determine, based on literature found and theoretical framework if this quantitative study will examine if a relationship exists between fatherly involvement in students' lives and student achievement. The data that will be extracted is similar to the data is used for federal and state reporting for the state of Indiana.

- PROCEDURES

The data will request administrators to indicate which type (rural, urban, and suburban) of school district they are from. Principals will also be asked to complete the data request per Appendix A. The principal can authorize the technology director or other authorized staff members to create the data. The data file is similar to what the Indiana Department of Education uses to request state data. This format should be familiar to any school principal, technology director or staff member familiar with Indiana state reports.

1. The data will request administrators to indicate which type (rural, urban, and suburban) of school district they are from.

2. Principals will also be asked to complete the data request per Appendix A.
    a. The principal can authorize the technology director or other authorized staff members to create the data.
    b. The data file is similar to what the Indiana Department of Education uses to request state data. This format should be familiar to any school principal, technology director or staff member familiar with Indiana state reports.
    c. Once the data has been collected and placed into and Excel file using Appendix A and the STN number has been removed, the principal or designee can return the data file.

3. Principals will then send the data to the researcher using the following e-mail address: tgarland@tccs.k12.in.us or by U.S. Postal Service to the following address: 5394 South 600 East, Walton, IN. 46996. If requested, postage paid envelopes will be available to each participating school.

4. The researcher will then collect the data and organize it to determine student academic achievement. The following steps will be taken to calculate an academic achievement score:
    a. This process will be determined by averaging the *z* scores obtained through the data collection process from state (Indiana) and federal test scores (ACT, SAT, ECA and PSAT).
    b. Transform state (Indiana) and federal test scores (ACT, SAT, PSAT and End of Course Assessment English/language arts and algebra I) into *z* scores.
    c. Average the testing *z* scores to obtain an overall academic achievement score.
    d. Transfer student GPA into *z* scores based on individual school buildings to ensure GPA is standardized due to schools having different metrics to calculate GPA's. The data collected will be split in two and converted in to *z* scores based on lunch status of the student.

5. Results of the data collection will be sent back to the principals who participated in the survey.

6. Results of the data collection will be kept on the researcher's computer and password protected for six months.

7. The data source will be destroyed after three years, as per the regulations of good conduct in research.

- POTENTIAL RISKS AND DISCOMFORTS

We expect that any risks, discomforts, or inconveniences will be minor and we believe that they are not likely to happen. If discomforts become a problem, you may discontinue your

participation at any point during the study. There are no costs to you or the school for participating in the study. The process of retrieving the data will take approximately 45 to 60 minutes to complete. This information collected is similar to the data that is required for state reports. The information collected may not benefit you directly, but the information learned in this study should provide more general benefits to school administrators and parents.

- POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

It is not likely that you will benefit directly from participation in this study, but the research should help us learn how to improve services for students who have fatherless homes and encourage schools to understand the why students may not achieve as students with fathers in the home. This study does not include procedures that will improve your physical disability or general health.

- PAYMENT FOR PARTICIPATION

You will not receive any payment or other compensation for participation in this study. There is also no cost to you for participation. If the data collected cannot be returned electronically the principal can, if requested, postage paid envelopes will be available to each participating school.

- CONFIDENTIALITY

Confidentiality will be maintained as only the researcher and/or dissertation committee will have access to the names of participating schools and principals. Anonymity of students will be assured, in that the information will be de-identified by the school prior to its being sent to the researcher. The information collected will be stored securely and confidentially on a laptop computer that is password protected. Individuals from the Institutional Review Board may inspect these records. Should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary. The data collection will require access to the schools current student information system. By completing the consent form you are voluntarily agreeing to participate and release the data as requested.

- PARTICIPATION AND WITHDRAWAL

You can choose whether or not to be in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. There is no penalty if you withdraw from the study and you will not lose any benefits to which you are otherwise entitled.