FATHER INVOLVEMENT AND ACADEMIC ACHIEVEMENT IN PARENTING

TEEN GIRLS

A Thesis

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by

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FATHER INVOLVEMENT AND ACADEMIC ACHIEVEMENT IN PARENTING TEEN GIRLS

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Graduate and Professional Studies in Education
Abstract

of

FATHER INVOLVEMENT AND ACADEMIC ACHIEVEMENT IN PARENTING
TEEN GIRLS

by

Jolene Grace Hardin

Statement of the Problem

Teenage pregnancy and childbearing is an important problem in the United States with significant consequences. Women who have children when they are teenagers tend to have lower levels of education, many drop out of high school and most of those will never return to graduate (Hoffman & Maynard, 2008). In addition to the affects and long-term implications that lower levels of education and dropping out of high school can have on the teen parent, it can also affect the child of the teen parent as well as society. It is important then to investigate variables that could lead to academic achievement and academic success in this specific population. Father involvement can affect both academic achievement and academic success in girls as well as sexual activity among adolescent girls (Cabrera, Shannon, & Tamis-LeMonda, 2007; Ellis et al., 2003; Flouri & Buchanan, 2004; Flouri, 2006; Geddes, 2008; Katz & Van Der Kloet, 2010; Krohn, & Bogan, 2001; Williamson, 2004) and may be a variable that can reduce potential for
negative outcomes and play a critical role in academic achievement and success amongst parenting teen girls.

The purpose of the current study was to investigate the relationship between perceived father involvement during the childhood years from birth through the age of 12, and academic achievement in high school, among teenage mothers. In addition, two subcomponents of interest, closeness and amount of time spent together, were analyzed as predictor variables to determine whether or not one of the variables would be a stronger predictor of academic achievement in parenting teen moms than the other. Finally, influential variables were controlled in order to evaluate whether the relationship between father involvement and academic achievement in parenting teen girls remained significant.

Sources of Data

Twenty-five parenting teen girls with an age range of 15-19 (mean age = 18.1 years, SD = .81) from four continuation High Schools located in Northern California completed questionnaires addressing father involvement and demographics. Current and overall GPA as well as most recent Standardized Test Scores were collected and utilized to measure academic achievement.

Conclusions Reached

A significant and positive correlation was found between overall GPA and closeness as a subcomponent of father involvement. In addition, closeness to a father was a stronger predictor of academic achievement in parenting teen girls than amount of time
spent with a father. There were no significant associations found between overall father involvement and academic achievement.

__________________________, Committee Chair
Dr. Kimberly Gordon Biddle

__________________________
Date
DEDICATION

This work is dedicated to my loving, supportive, wonderful family that encouraged me and believed in me with all of their hearts throughout this whole process. First and foremost, to my amazing mother who loved me more than words can express. I would never have attempted this journey without the courage, perseverance, and ambition that you instilled in me. Our bond is like no other and although you were not here in the physical world to complete this process with me, I know you were by my side all the while, watching over me and beaming with pride, because that is the type of mother you are. I miss you every second of every day. I love you to the moon and back. This is for you.

Next, to my partner, and soon to be husband (Yes, I’m actually graduating!), Jarret, and children, Chase, Jossalin, and Joziah, for the hours you sacrificed being away from me, for the days you put up with me not being able to give you my undivided attention, and for the years that you dealt with me being a little sporadic at times. I hope that I have set a clear example to you, my children, that you can do anything you set your mind to. Yes, there may be times when you feel like giving up, yes it can be overwhelming and make you feel and act ‘crazy’, and yes it all makes you a stronger, better, more focused person. So, when times get rough, don’t stop believing in yourself, work hard to persevere because you can accomplish anything you wish. There were definitely times I questioned my journey and the outcome. Without you, Jarret, there is no doubt in my mind that I would have given up. You pushed me when I came to a stop,
you raised me up when I was at my lowest, and you held my hand when I needed strength. Now onward and upward we go, just as planned my love. This is for you.

And last, but certainly not least, to my Step Dad, Fred, you are the reason I took interest in education. Your encouragement, though it may have been a bribe at the time, is what motivated me to ‘do good’ in school. The topic of this thesis is transcribed through your doing. When everyone else felt bad for me because I was a young mother, when society looked at me as if I didn’t have much of a future, when others thought I wouldn’t go far, you made me feel like I could do ANYTHING. This is for you.
ACKNOWLEDGMENTS

This experience has been long, hard, and very rewarding. It has put everything into perspective and I have gained some important life lessons; family, and the love shared between family, is the single most important thing in life, time with loved ones must be a priority because it is the single most important part of life, and living in the moment and making yourself present is essential to happiness in life. I know from experience how quickly life can change. I will treasure every moment, even the difficult ones.

I want to thank everyone who has come along on this journey with me. First I would like to thank Dr. Gordon-Biddle and Dr. Raskauskas for supporting me, encouraging me, and understanding the personal obstacles that I faced through this process. If it weren’t for your patience and gentle nudges forward I would not be where I am at today. Your knowledge and expertise is priceless and I thank you so much for sharing it with me.

I would like to thank the teen parents who participated in this study and the many people it took to move forward with collecting data such as the principals of the schools, the secretaries, and the liaisons that worked so closely with me and offered me their valuable time. I would also like to thank my colleagues and the KidZKount PCAC, Inc. agency as a whole for supporting me and granting me time to work on this thesis.

Finally, a huge thank you to all of my family and friends. Thank you for believing in me, supporting me, and listening to me complain. It really helped!
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Chapter 1

INTRODUCTION

Purpose of the Study

The primary purpose of the current study was to investigate the relationship between perceived father involvement during the childhood years, from birth through the age of 12, and academic achievement in high school among teenage mothers. More specifically, to investigate whether a positive correlation existed between teen mothers’ perspectives of how involved their fathers were throughout their childhood and their academic achievement in high school. In addition, certain subcomponents of father involvement were examined for relative association with academic achievement. For example, closeness and amount of time spent together, two subcomponents of interest, were analyzed as predictor variables to determine whether or not one of the variables was a stronger predictor of academic achievement in parenting teen girls than the other.

Research has identified a host of psychological, social, and structural variables that are associated with academic achievement (see Resnick et al., 1997). Therefore, the present study controlled for influential variables such as socio-economic status, age of the teenage mother, age of the teenage mother’s child, age of the biological father to the infant, involvement of infant’s father, and external support of family members such as parents and grandparents in order to evaluate whether the relationship between father involvement and academic achievement in parenting teen girls remained significant. It is recognized that the developmental environment of teenage mothers is quite different than
that of their peers (Berglas, Brindis, & Cohen, 2003; Hotz, McElroy, & Sanders, 1997, 2005; Maynard, 1996; Klein, 2005; Sullivan et al., 2011). Not only have they already engaged in risky behavior, having sex, they have a child. This subpopulation of youth is faced with unique challenges and issues (Hoffman & Maynard, 2008; Hotz et al., 1997, 2005; Klein, 2005; Perper, Peterson, & Manlove, 2010; Sullivan et al., 2011). Therefore influential variables unique to the population were controlled in order to see if the relationship between father involvement and academic achievement would hold true. Moreover, specific variables were controlled in order to investigate whether or not father involvement would continue to have an impact such that greater father involvement would be associated with greater academic achievement.

It is hypothesized that there will be a statistically significant positive correlation between father involvement and academic achievement, meaning, as the perceived level of father involvement goes up so will the academic achievement of the parenting teen girl. In addition, it is hypothesized that the subcomponent of closeness will be more powerfully associated with academic achievement in parenting teen girls than the subcomponent of amount of time spent together. Finally, it is hypothesized that, after controlling for confound variables, father involvement will remain a strong predictor of academic achievement in parenting teen girls. By examining the relationship between these variables, while controlling for other factors associated with academic achievement, the present study attempted to identify whether or not there are any statistically
significant relationships between father involvement and academic achievement in parenting teen girls.

**Statement of the Problem**

Teenage pregnancy and childbearing is an important problem in the United States with significant consequences (California Department of Education, 2013; Klein, 2005). Among Westernized countries, the U.S. has the second highest teenage pregnancy rate; only the rate in Mexico is higher (California Department of Public Health, 2009). According to Klein (2005), among comparable industrialized countries the United States has the highest adolescent birth rate. Teenage pregnancy and childbearing poses significant societal issues and personal problems to teenage mothers (Berglas et al., 2003; Hotz et al., 1997, 2005; Maynard, 1996; Klein, 2005; Sullivan et al., 2011). Women who have children when they are teenagers tend to have lower levels of education. In addition, many drop out of high school and seldom return to graduate (Hoffman & Maynard, 2008). Though it is important for teenage mothers to do well in school so they can eventually graduate, this is a difficult task for this special population of students that often requires a strong system of support.

Research shows that family relationships can affect many aspects of a child’s development, including academic success and achievement (Cowen & Cowen, 2004; Flanders, Leo, Paquette, Pihl, & Seguin, 2009; Flouri & Buchanan, 2004; Geddes, 2008; Krohn & Bogan, 2001; Lewis & Lamb, 2003). For girls in particular, relationships between fathers and daughters are very important and can influence many areas of a
young girl’s life such as peer relationships, emotional development, cognitive
development, sexual behaviors, and educational outcomes (Cabrera, Shannon, Tamis-
LeMonda, 2007; Flouri & Buchanan, 2004; Geddes, 2008; Katz & Van Der Kloet, 2010).
Due to the significant influence that a father can have on a daughter’s development,
researchers have paid close attention to the advantages and disadvantages regarding
father’s involvement and their daughter’s development (Lamb, 2002). For example,
correlations have been found between father involvement and teenage pregnancy as well
as father involvement and academic achievement and success. More specifically, as
father involvement increases teenage pregnancy decreases and academic achievement
and success increase (Ellis et al., 2003; Flouri, 2006; Flouri & Buchanan, 2004; Ho Sui-
Chu & Williams, 1996; Katz & Van Der Kloet, 2010; Krohn, & Bogan, 2001). There is a
lack of research however, on the relationship between father involvement and academic
achievement in teen mothers.

Research has shown the construct of father involvement to encompass several
subcomponents pertaining to a wide range of factors such as play, discipline,
communication, emotional support, financial support, closeness, and amount of time
spent together to name a few (Cabrera et al., 2007; Flouri & Buchanan, 2004; Geddes,
2008; Katz & Van Der Kloet, 2010; Paquette, 2004). In addition, certain subcomponents
of father involvement have been shown to be strong predictors on children’s
development, including development pertaining to academic achievement (Cabrera et al.,
2007; Flouri, 2006; Geddes, 2008; Ho Sui-Chu & Williams, 1996). For example, Flouri
(2006) found fathers’ interest in their daughters’ education to be a significant predictor of academic success. Likewise, Ho Sui-Chu and Williams (1996) found a positive association between academic achievement among eighth graders and conversations about school related activities between parents and children that occurred at home. Missing from the literature, however, is research on father involvement and teenage mothers. Would a similar positive relationship emerge in this population? In addition, there is little information on the relative influence amongst subcomponents. Perhaps one subcomponent (closeness) may be a stronger predictor of academic achievement than another subcomponent (amount of time spent together).

Due to the prevalence of this population and the potential impact father involvement can have on academic achievement in teen girls it is important to investigate this topic further. Any insight as to what contributes to low and high academic achievement in this specific population would be beneficial and could potentially increase educational attainment in teen moms. By identifying contributors to academic achievement in teen moms, knowledge of the subject could assist parents of teen moms in supporting their children through school as well as support the development of effective programs aimed towards working with teen moms.

**Significance of the Study**

Teenage pregnancy is quite prevalent in the United States (California Department of Public Health, 2009; Klein 2005). Teenage mothers tend to have lower levels of education, a high drop out rate, and are less likely to return to graduate (California
In addition, unintended pregnancy is associated with a host of negative outcomes for both the children of the pregnancies and their parents including low infant birth weight, developmental delays, insecure attachments, poverty, and low educational attainment (Chuang, Hillemeier, Dyer, & Weisman, 2011; Gipson, Koenig, Hindin, 2008; Kost, Landry, & Darrock, 1998). The odds are against teen moms when it comes to academic achievement. In California pregnant and parenting teenagers have a 70% school drop out rate (California Department of Education, 2013). Although some resources do exist to support academic success for pregnant and parenting teens, such as school-based teenage parenting programs, these resources are not often readily available and are often hard to find (Wire National News, 2012). Knowing this, it is extremely important to identify what, if any, other variables influence academic achievement amongst this specific and prevalent population.

Research has demonstrated that father involvement is directly related to sexual activity and teenage pregnancy (Ellis et al., 2003; Katz & Van Deer Kloet, 2010; Williamson, 2004). In a study done by Ellis et al. (2003) teenage girls with an absent father were much more likely to engage in early sexual activity and become pregnant. In contrast, Katz and Van Der Kloet (2010) found that teenage girls who had responsive fathers in their lives, fathers they felt close to, that offered emotional support, and whom they could communicate with, were more likely to refuse unwanted sex, show a strong
sense of sexual assertiveness, and have higher levels of self worth. These studies illustrate the role of father involvement in teen girls’ sexual activity and choices.

Father involvement has also been directly related to academic success in adolescent girls (Flouri, 2006; Ho Sui-Chu & Williams, 1996; Krohn et al. 2001). Flouri (2006) looked at mothers’ and fathers’ interest in their child’s education and the effects on the child’s academic success. The sample consisted of fathers, sons and daughters. Results indicated that only the daughters’ academic success, not the sons’, was affected by the fathers’ interest in their education. Furthermore, the association found was positive. In addition, Krohn et al. (2001) looked at the effects of absent fathers on their daughters’ college enrollment. Findings from this study suggest that father absence negatively affects college enrollment in girls by affecting several other aspects of their lives such as cognitive development, school performance, and teenage pregnancy. These studies emphasize the impact that father involvement can have on academic outcomes.

This is not to say that mothers are not important. In fact there is much research emphasizing the important role of mothers, perhaps because child development is more commonly associated with the relationship between the mother and child. However, father involvement is less studied, yet equally important to understand. The focus for the present study was on the unique affects of fathers.

Furthermore, cognition, motivation, language, social and emotional development, and academic achievement and success are all very important developmental domains that have been associated with different subcomponents of father involvement such as
play, quality of interactions, and father’s interest in education (Cabrera et al., 2007; Flouri, 2006; Geddes, 2008; Paquette, 2004). For example, the amount and type of play that takes place between a parent and a child has been shown to have different effects on children’s development. According to Lewis and Lamb (2003), paternal play styles have been linked to IQ levels, motivation, and language development in children. Quality of interactions, a component of father involvement, was the focus of one study, which found an association between positive father-child interactions and healthy social and emotional development in children (Cabrera et al., 2007). In addition, Flouri (2006), focused on the subcomponent of father’s interest in their daughters’ education. Results showed a positive correlation between fathers’ interest in their daughters’ education and daughters’ academic achievement. Findings from these studies emphasize the important influence that a variety of subcomponents of father involvement can have on several areas of children’s development. Though results have shown to be significant, the findings cannot be generalized to the special population of parenting teen girls. Moreover, studies have not pointed to one subcomponent of father involvement being more influential than another specifically pertaining to academic achievement.

Lastly, father involvement in childhood affects many aspects of development and has both short and long term effects (Geddes, 2008; Lewis & Lamb, 2003). It is crucial to understand and acknowledge that father involvement in childhood can influence and affect outcomes through adulthood. The quality of father involvement, for example, has been shown to have many effects on child development but it has also been shown to last
all the way into adulthood and have effects on adult adjustment as well. Lewis & Lamb (2003) investigated whether or not a correlation could be found between adult men’s reports of their childhood, including their relationships with their parents, and their own paternal involvement and sensitivity. They concluded that male children who experience secure relationships with their parents grow into adults who are more sensitive to their children's needs and more involved in their children’s lives. In addition, Geddes (2008) found that the level of closeness between a father and a child is positively correlated to educational and occupational outcomes. These results indicate that father involvement is not only an important and influential factor regarding child development but it is also an important and influential factor regarding adult development. Due to the impact and long lasting effects that father involvement in childhood has on developmental outcomes, it is important to look at father involvement during childhood. The goal of the current study was to access how perceived father involvement in childhood, more specifically birth to 12 years of age, influenced academic achievement in female adolescent parents.

**Potential Confounders**

One variable that has been closely associated with both academic achievement and father involvement is socio-economic status (SES) (Cabrera et al., 2007; Young, Johnson, Hawthorn, & Pugh, 2011). Generally, positive correlations exist between SES and both academic achievement and father involvement. Cabrera et al. (2007) found that the father’s level of income was a predictor of several developmental domains in children such as language and social and emotional development. The study also found that the
level of education and level of income of fathers are both key predictors in father involvement resulting in more positive father child engagement. Controlling for SES, ensures that the relationship between father involvement and academic achievement is not spurious. As a result, many studies involving father involvement and child outcomes control for socio-economic status (Sarkadi, Kristianson, Oberklaid, & Bremerberg, 2007).

Furthermore, academic achievement in parenting teen girls may be influenced by other factors. For example, Resnick et al. (1997), found that appearing older or repeating a grade was associated with higher levels of emotional distress in junior high and high school students which can indirectly effect academic achievement. Attention and behavioral problems have been linked to academic achievement in teens as well (Barriga et al., 2002). In addition, the availability of family and social support can impact academic motivation and achievement. Young et al. (2011) discovered an association between perceived social support, motivation, and academic achievement in African American college students. These studies point out that there are psychological, social, and structural variables that do exist and are associated with academic achievement. Additional factors and confounders specific to the population of teen moms that should not be overlooked are age of teen mother, age of the father of the child, age of the child, involvement of teen father, and external support of family members such as parents and grandparents. It is important to recognize these confounding variables and control for them accordingly.
Conclusion

Despite the fact that research on father involvement has steadily increased over the last three decades (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000), there remains a lack of emphasis regarding their direct or indirect effects on parenting teen girls. The primary goal of this study was to investigate the relationship between father involvement and academic achievement in parenting teen girls in hopes of understanding how the important variable of father involvement may impact academic achievement in this specific population. To delve deeper into the topic, the current study investigated whether or not a specific subcategory of father involvement, closeness, would have a more significant association with academic achievement than another subcategory, amount of time spent together. Lastly, given that other factors such as SES, age of teenage mother, age of child, age of child’s father, involvement of child’s father, and external support may also be associated with academic achievement, the current study controlled for these variables in order to ascertain whether or not the relationship between father involvement and academic achievement would remain significant. Findings from this study may benefit teachers, parents, and students by providing them with an understanding of the role that father involvement plays in academic achievement amongst parenting teen girls as well as providing a variable of focus when it comes to providing additional support to these teen mothers.
Methods

Participants and Procedures

In the present study, parenting teen girls were recruited from four different continuation high schools located in Northern California. Participants consisted of 25 teenage mothers ranging in age from 15-19 years. Flyers explaining the current study, as well as parent/guardian consent forms (see Appendix A), were sent home with the students in an envelope. Students were asked to return the parent/guardian consent forms to a designated liaison. A minor assent form was given to and collected from all participants prior to administration of questionnaires (see Appendix B). The consent and assent forms included a description of what the participants would be asked to do, benefits they would receive for participating, any risks they may be exposed to, and how those risks would be minimized by the researcher.

Once participation was confirmed, through signed and returned consent forms, the students were given a specific date and time to meet in the cafeteria to complete the survey measures. Permission for the students to miss class in order to participate in the study was requested from the principal of the high school. Information about missing class time in order to participate in the study was also included in the consent form for the parent or guardian of the minor as well as the assent form for the minor. Prior to beginning the questionnaires participants were given assent forms, which they were asked to read and sign. Participants were informed through the assent form that they did not have to answer any question if they did not want to, they could withdraw from the study.
at any time and they did not have to complete the questionnaires if they did not want to. In addition, information was provided to the participants through the assent form about the school councilor and/or district case manager in the circumstance that they felt they needed to discuss emotions relating to the questions in the study.

**Measures**

**Father involvement.** To assess the teen mother’s perceptions about level of father involvement the Father Involvement Scale (FIS) (Finley & Schwartz, 2004), the Nurturant Fathering Scale (NFS) (Finley & Schwartz, 2004), and the In Home Questionnaire borrowed from the National Study of Adolescent Health (Harris et al., 2009) were used. All of these tools are designed to measure father involvement through an adolescent’s or young adult’s point of view. For the sake of this study, participants were asked to reflect upon their fathers’ involvement through their childhood, specifically birth to 12 years old.

The FIS (Finley & Schwartz, 2004) and the NFS (Finley & Schwartz, 2004) consist of questions referring to the past whereas the In Home Questionnaire (Harris et al., 2009) consists of questions referring to the present. For the sake of this study questions from the In Home Questionnaire were changed to past tense in order to reflect the adolescent’s or young adult’s childhood years. The FIS is a survey in the form of a 5-point Likert-type scale. The survey consists of 20 questions. Each question focuses on a different domain of father involvement (see Appendix C). The FIS addresses the adolescent’s and/or young adult’s perception of their father’s involvement in their life...
throughout their childhood. Possible scores range from 20 to 100. The FIS is designed to measure reported father involvement, that is father involvement from the adolescent or young adult’s perspective, as well as desired involvement, that is how involved the adolescent or young adult would have liked her father to be (Finley & Schwartz, 2004). For the sake of the current study only the reported involvement was measured and the desired involvement was omitted. The NFS (Finley & Schwartz, 2004) also addresses father involvement from the adolescent or young adult’s perspective. Like the FIS (Finley & Schwartz, 2004) the NFS (Finley & Schwartz, 2004) is a survey in the form of a 5-point Likert-type scale. This survey consists of nine questions, each of which characterizes the relationship between the child and the father (see Appendix D). Possible scores range from 9 to 45 (Finley & Schwartz, 2004). The In Home Questionnaire (Harris et al., 2009) addresses several aspects of father-child relationships and consists of 18 categories of father involvement. For the sake of the current study only the items measuring time spent together were utilized creating 10 questions presented in a 5-point Likert-type scale format. Possible scores range from 50 to 100 (see Appendix E).

In all measures, FIS (Finley & Schwartz, 2004, NFS (Finley & Schwartz, 2004) and the In Home Questionnaire (Harris et al., 2009), participants were asked to identify the father figure they would be referring to throughout the survey. In the current study participants were not asked to identify a specific father figure, rather, they were asked to answer all questions in all measures regarding the one person they think of as having been the most important father figure in their life. This information was stated at the top
of all scales. In addition, participants were asked to respond to all questions referring to their fathers’ involvement throughout their childhood, specifically birth to 12 years old.

**Academic achievement.** In this study grade point average (GPA) along with standardized test scores, consisting of the California High School Exit Exam (CHSEE) Math and CHSEE English, were used to assess the teen mothers’ academic achievement. Grade point averages and standardized test scores of all the participants were collected through the high school administration office. GPA for the current semester as well as overall GPA was used. In addition, test scores from the most recent standardized test administered at the high school were used. Permission to obtain students’ GPA and standardized test scores was included in the consent and assent form for the parent or guardian of the minor and the minor herself. Past studies have used GPA as a measurement for academic achievement (Ellis et al., 2003). Ultimately, by obtaining GPA along with standardized test scores for all participants the robustness of academic achievement as an independent variable was increased.

**Control variables.** There are several confounding variables present in the current study, which were recognized and controlled. A demographics page addressing the following confounds was included with the questionnaires. Participants were asked to identify their age, the age of their child, the age of the child’s father, whether or not the father of the child lives in the home, if the father of the child is involved, if the teen mother and her child live alone or with others such as parents or grandparents, and lastly their socio-economic status. In order to assess SES participants were asked whether or
not they have ever qualified for reduced lunch. This information was obtained in questionnaire format on the demographics page (see Appendix F).

**Analyses.** The hypothesis for the current study was that academic achievement would be significantly and positively correlated to perceived father involvement among parenting teen moms throughout their childhood. In other words, as the level of father involvement goes up so would academic achievement. A second hypothesis was that closeness, as a subcategory of father involvement, would be a stronger predictor of the association between father involvement and academic achievement in parenting teen girls than the amount of time spent together. Finally, a third hypothesis was, after controlling for confounding variables, father involvement would remain to be a strong predictor of academic achievement in parenting teen girls.

Once all data were collected and entered, correlation analyses and multiple regression analyses were computed. To assess the first hypothesis Pearson’s Correlation’s Coefficient statistical analyses were used to determine whether or not a statistically significant correlation existed between the FIS (Finley & Schwartz, 2004) and all measures of academic achievement, consisting of GPA, current and overall, and standardized test scores. Next, addressing the second hypothesis, multiple regression analyses were used to assess which subcategory of father involvement, closeness, measured by the NIS (Finley & Schwartz, 2004), or amount of time spent together, measured by the In Home Questionnaire (Harris et al., 2009), would show to be the stronger predictor of father involvement on academic achievement. Lastly, addressing the
third hypothesis, hierarchal multiple regression analyses, controlling for cofounding variables were used to assess the significance of the relationship between father involvement and academic achievement in parenting teen girls.

**Definition of Terms**

*Academic achievement*

In the present study the term ‘academic achievement’ refers to how well the teen mother has done academically and is measured by utilizing GPA, current and overall, and most recent Standardized Test scores including California High School Exit Exam (CHSEE) Math scores and CHSEE English scores.

*Academic success*

In the present study the term ‘academic success’ refers to level of educational attainment.

*Closeness*

In the present study the term ‘closeness’ refers to the extent of psychological and social-emotional support provided to a child by a father or father figure.

*Father involvement*

In the present study the term ‘father involvement’ is referring to the father or influential father figure of the teenage mom and is measured based off of the teenage mother’s recollection of the time she was 0-12 years old.
Mesosystem

A subsystem from Urie Bonfenbrenner’s Ecological Systems Theory. The mesosystem consists of two or more settings from the microsystem, such as home and school and home and neighborhood, and the interrelations that are present.

Microsystem

A subsystem from Urie Bonfenbrenner’s Ecological Systems Theory. The microsystem involves immediate settings such as the home and school. This is the subsystem that involves direct interactions between father and child.

Teen moms

In the present study the term ‘teen moms’ is referring to an adolescent between the ages of 13 and 19 that has given birth to a child and is raising the child.

Time spent together

In the present study the term ‘time spent together’ refers to the amount of time that is spent together between a child and their father or father figure.

Limitations

There are some important limitations to the present study. First, some of the analyses mentioned are dependent upon a larger sample size. Due to the sample size of 25 participants, results may lack the power to detect differences. Secondly, both the FIS (Finley & Schwartz, 2004) and the NFS (Finley & Schwartz, 2004) are surveys which require recall of the participants. Introducing recollection can create an issue by decreasing the reliability and/or internal validity of the measures. Thirdly, the analyses
used are correlation analyses. The results show associations and relationship but ultimately lack any causal information.

On the other hand, the current study has important strengths as well. All questionnaires, the FIS (Finley & Schwartz, 2004), the NFS (Finley & Schwartz, 2004), and the In Home Questionnaire (Harris et al., 2009), allow participants to report on their fathers or father figures whether they were residential or nonresidential. This is important because it is not uncommon for a relationship to exist with a father that does not live in the home. Not to mention the commonality of the nonresidential father. Moreover, many children never know their biological father yet have very influential father figures in their lives. In all surveys the biological father does not need to be the figure reported on, but instead participants may use the most important father figure that was in their life while growing up between the ages of 0-12. Lastly, parenting teen girls are a very understudied yet important and prevalent population in the United States. The current study is initiating a first look at father daughter relationships and academic achievement in this specific population and hopefully may be used as a foundation for future studies.

**Organization of Study**

This chapter has provided a detailed introduction to the current study of father involvement and academic achievement in parenting teen girls. Included in the introduction was: purpose of the study, explanation of the problem, significance of the study, methods, limitations, and relevant definitions. Chapter 2 presents an in depth literature review relating to the topic. Chapter 3 provides a description of participants,
measures, and procedures utilized to complete the data collection process. Chapter 4 reports the analysis of the data including results. Finally, Chapter 5 provides a discussion of the findings, conclusions drawn from the findings, and suggestions for future research.
Chapter 2

REVIEW OF THE LITERATURE

Teen pregnancy and parenting have societal impacts that stem from the teen being a parent as well as the child of the teen parent, due to implications on their development. Teen pregnancy and parenting have been related to a host of negative outcomes for the children of the pregnancy (Klein, 2005; The National Campaign to Prevent Teen Pregnancy, 2010; Sullivan et al., 2011). However, academic achievement and academic success of mothers has been linked to positive parenting style and practices as well as beneficial development of the child (Essex et al., 2006; Hesketh, Ball, Crawford, Campbell, & Salmon, 2007; Magnuson, Sexton, Davis-Kean, & Huston, 2009; Ryan-Krause, Meadows-Oliver, Sadler, & Swartz, 2009; Sullivan et al., 2011; Tamis-LeMonda, Briggs, McClowry, & Snow, 2009) and may be a key resilience factor in predicting positive developmental outcomes for both teen parents and their children, including the health of the child of the teen parent, as well as the impacts on society and therefore is an area of focus. Father involvement, which has been linked to later sexual activity, less teen pregnancy, academic success and academic achievement in adolescent girls (Ellis et al., 2003; Flouri, 2006; Katz & Van Deer Kloet, 2010; Krohn et al., 2001; Williamson, 2004), is another focal point and will be addressed. When looking at both variables, academic achievement and father involvement, it is important to consider the family structure, such as a father being present, in order to understand the relationships that may exist between variables more thoroughly.
Theoretical Background

Ecological Systems Theory

When investigating the relationships that exist within the family structure many researchers use the Ecological Systems Theory developed by Urie Bronfenbrenner to guide their research. This theory focuses on child development within the ecological system in its entirety placing emphasis on a series of interrelated subsystems: microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Bronfenbrenner, 1994). The microsystem involves immediate settings such as the home and school. This is the subsystem that involves direct interactions between father and child. The mesosystem consists of two or more settings from the microsystem, such as home and school and home and neighborhood, and the interrelations that are present. The exosystem involves interrelations that exist between two or more settings but with the restriction that one setting does not involve the child. An example of this is home and father’s workplace or perhaps home and the father’s family, including parent’s beliefs about their son’s responsibilities. Next is the macrosystem, the overarching interrelations of all previous subsystems existing in a given culture. Belief systems, job options for teen parents, and available resources regarding teen pregnancy and child rearing are some examples that constitute this subsystem. Last is the chronosystem, referring to change that occurs over time within an individual as well as the environment (Bronfenbrenner, 1994).
**Bioecological Systems Theory**

More recently the Ecological Systems Theory has been renamed as the Bioecological Systems Theory due to a more pronounced emphasis placed on the biology of an individual being an influential factor. Similar to the Ecological Model the Bioecological Model looks at human development over time with a focus on specific age periods including childhood and adolescence. In addition, the Bioecological Model aims to apply research findings to policies and programs that support and enrich youth and family development (Bronfenbrenner & Morris, 2006). According to this model, interactions between an individual and his or her immediate environment including people, places, and objects play a significant role in the individual’s development. This reciprocal interaction is referred to as ‘proximal processes’. Furthermore, in order for the interaction or activity to affect development it must occur somewhat consistently over time (Bronfenbrenner & Morris, 2006). The Bioecological Systems Theory acknowledges that, for children, the parents will most often be the individuals whom engage in interactions/activities with their children on a consistent basis. However, this model also acknowledges that this is not always the case and that ‘significant others’ may play this role or at the very least an equally significant role, thus supporting the notion that a father figure can have an influential role in a child’s life equal to or possibly more significant than that of a biological father.

The Bioecological Model of Human Development is the theoretical framework that guided the present study. The Bioecological Systems Theory, stemming from the
Bioecological Model of Human Development, emphasizes that relationships exist within and amongst all subsystems. Any change occurring in any one area can impact all other areas. For example, the level of father involvement that exists in childhood could affect academic achievement later in life. For the purpose of this study the microsystem and the mesosystem were the focus, looking at father involvement in childhood 0-12 years old (microsystem) and the relationship with academic achievement in parenting teen girls attending high school (mesosystem). According to Tudge, Mokrova, Hatefield, and Karnik (2009), who did a study on the proper uses and misuses of Bronfenbrenner’s Bioecological Theory, in order to accurately apply the Bioecological Model in its entirety to research, one must take into consideration the process-person-context-time model (PPCT). PPCT is referred to as the ‘mature’ model due to it being the later of Bronfenbrenner’s work, starting in the mid 1990’s and continuing until his death in 2005 (Tudge et al., 2009).

**Process-person-context-time model.** The process-person-context-time model consists of four concepts: process, person, context, and time (Bronfenbrenner & Morris, 2006). The first concept, process, refers specifically to ‘proximal processes’, explained earlier as the reciprocal interaction between an individual and their immediate environment including people, places, and objects. The second concept, person, refers to an individual’s personal characteristics. These characteristics are divided into three categories: demand, resource, and force. Demand characteristics are characteristics that are immediately apparent to another person such as age and gender. Resource
characteristics, in contrast, are not immediately apparent. These characteristics relate to mental, emotional, social, and material resources such as past experiences, SES, supportive parents, and educational opportunities. The last of the three characteristic categories is force. Force characteristics refer to those related to differences in biological variables such as temperament and motivation. The next concept of the PPCT model is context, which refers specifically to the five interrelated subsystems from the Ecological Systems Theory: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Lastly, time is the fourth and final concept of the PPCT model and is divided into three categories. That which is occurring during an activity or interaction constitutes micro-time. The consistency of an occurrence regarding a specific activity or interaction is referred to as meso-time. Finally, macro-time, which takes into consideration that historical events are likely to alter the developmental processes of an individual depending on the age of the individual.

Tudge et al. (2009) state that in order to support the accurate framework of the Bioecological Model the four concepts of PPCT must be addressed and incorporated. The current study aimed to do just that by looking at proximal processes that take place between a father and his daughter from age 0-12 (process and time), demographic variables of the adolescent daughter such as SES, age they had a child, and family support (person), and investigating the relationship that may exist between father involvement and high school academic achievement of parenting teen girls (context). It is acknowledged by Tudge et al. (2009) that partial utilization of the major concepts may be
appropriate so long as it is stated clearly. It should be noted that the ideal incorporation of
time applied to a study is longitudinal in design (Tudge et al., 2009). The current study is
not longitudinal in design, however the concept of time is incorporated through meso-
time as in the measure of father involvement as stated above.

The Bioecological Systems Theory guided and supported the investigation of the
following questions: Will a relationship exist between father involvement and academic
achievement in parenting teen girls? Will one subcategory of father involvement,
closeness, have a more significant association with academic achievement than another
subcategory, amount of time spent together? Will the relationship between father
involvement and academic achievement remain significant once extraneous variables are
controlled? In line with the Bioecological Systems Theory’s goal to apply research
findings to policies and programs that support and enrich youth and family development,
the present study aimed to benefit teachers, parents, and students by providing them with
an understanding of the role that father involvement plays in academic achievement
amongst parenting teen girls as well as providing a variable of focus when it comes to
providing additional support to teen mothers. Parallel with this goal is the importance of
understanding teenage pregnancy in our culture.

**Teen Pregnancy**

Teen pregnancy and childbirth is an important problem in the United States. So
much so that it has been referred to as ‘a matter of national concern’, by the National
Research Council as well as ‘a serious social problem’ by former President Bill Clinton
(Hotz et al., 1997). The United States has the second highest teenage pregnancy rate among Westernized countries (California Department of Public Health, 2009) and the highest teenage pregnancy rate amongst comparable industrialized countries (Klein, 2005). In 2010 alone the rate of teen pregnancy and birth was 34.2 per 1000 teen girls ages 14-19 (Martin et al., 2012). This produces quite a high number of teen births considering that in that same year there were a total of 3,999,386 births in the US (Martin et al., 2012).

The odds are against teen moms when it comes to academic achievement. Teenage mothers tend to have lower levels of education, higher high school dropout rates, and are less likely to return to graduate (Hoffman & Maynard, 2008). In California pregnant and parenting teenagers have a 70% school drop out rate (California Department of Education, 2013). In a study done by Perper et al. (2010) a data analysis was conducted using the Longitudinal Study of Youth. Results from this study indicated that only 31% of moms under the age of 19 obtained a diploma and 10% obtained a GED. Findings from this study suggest that as the age of the teen mother decreases so does the likelihood of obtaining a diploma. In other words, the younger the teen mom is, the less likely they are to obtain a diploma (Perper et al., 2010). In addition, unintended pregnancy is associated with a host of negative outcomes for the children of the pregnancies including low infant birth weight, developmental delays, insecure attachments, poverty, and low educational attainment (Chuang et al., 2011; Gipson et al.,
Teen pregnancy and childbearing poses significant societal issues and personal problems to teen mothers and their children (Berglas et al., 2003; Hotz et al., 1997, 2005; Maynard, 1996; Klein, 2005; Sullivan et al., 2011). According to Klein (2005), teen mothers tend to face many hardships such as not finishing school, minimal vocational opportunities, living in poverty, and repeated pregnancies. An additional hardship for teen mothers is lack of parenting help. Being separated from the child’s father or not having a relationship with the child’s father is common among teen moms and is an implication of less parenting help (Hotz et al., 1997; Klein, 2005). In addition, teen moms are less likely to work, more likely to make less income at a job, and are more dependent on public assistance (Hotz et al., 1997). More than 80% of teen mothers in America live in poverty and utilize public assistance such as welfare (Maynard, 1996). Essentially these hardships can create a cycle that not only affects the socio-economic and personal well being of the teen mom and her child, but ultimately impact society as a whole.

When a teen mother is unable to complete high school she is less likely to obtain a good paying job. It is evident that in this day and age well paying jobs are requiring a greater demand for schooling (The National Campaign, 2010). In addition, due to the unique demand of parenting for this specific age group, teen moms often miss out on social interactions and therefore miss out on crucial psychosocial development (Hotz et
al., 1997, 2005; Klein, 2005). Basic typical teenage behavior such as socializing with peers, learning about themselves and developing as an individual, learning how to establish healthy relationships, and creating a support system are often no longer the priority when a child is involved. According to Hotz and colleagues (1997), it is due to less time and energy of the teen mother that these important areas of development are missed out on.

Lastly, the child of the teen parent is also affected by these circumstances, which may follow them into adulthood and add to the societal impact (The National Campaign, 2010; Sullivan et al., 2011). For example, children of teen parents are more likely to be born at a low birth weight, less than 5½ pounds, and more likely to suffer from poor health as they continue to grow (Klein, 2005; Moore, Morrison, & Green, 1997; Wolfe & Peroze, 1997). In addition, children born to teen mothers are more likely to need behavioral and developmental support, to suffer from child abuse, become involved in CPS, and end up in Foster Care (George & Lee, 1997; Klein, 2005; Sullivan et al., 2011) all variables that impact society. Lastly, daughters of adolescent mothers are more likely to dropout of high school, more likely to become teen parents themselves, and less likely to work their way out of poverty (Berglas et al., 2003; Haveman, Wolfe, & Peterson, 1997; Furstenberg, Levine, & Brooks-Gunn, 1990; Sullivan et al., 2011). These variables create a cycle involving the teen mom, her child, and society. Ultimately, the ability for the teen mom and her child to become active members of society is limited by the hardships that are introduced to teen parents. It is important to understand the unique
challenges teen parents and their children are faced with and investigate potential solutions.

**Academic Achievement**

One of the primary reasons that teen mothers may impact society is through dropping out of school and the long term implications of that. It is important then to investigate variables that could lead to academic success. According to Karbach, Gottschling, Splenger, Hegewald, and Spinith (2013) academic achievement, the quality of education performance, is a prerequisite to academic success, the level of educational attainment. Hence, academic achievement is an important variable to consider when looking at teen mothers, academic success, and outcomes associated with that population. Although some resources do exist to support academic achievement and academic success for pregnant and parenting teens, such as school-based teenage parenting programs, these resources are not often readily available and are often hard to find (Wire National News, 2012).

**Parental Involvement**

Academic achievement is a prerequisite to academic success (Karbach et al., 2013) and therefore is important to take into consideration when looking at teen mothers, outcomes, and potential solutions. Parent involvement has been shown to positively influence academic achievement in adolescence (Hill & Tyson, 2009; Karbach et al., 2013). After conducting a meta-analysis on 50 correlational studies involving parent involvement, academic achievement, and middle school aged children, Hill and Tyson
(2009) found a positive relation between parent involvement and academic achievement with the strongest relationship existing between parent involvement in academic socialization and academic achievement.

Karbach et al. (2013) also found an existing relationship between parent involvement and academic achievement. A sample from a previous study involving 334 twins ages 10-14 was utilized. Participants completed questionnaires rating perceived parent involvement. In order to assess academic achievement mid-term and full-term grades for math and language were provided by parents. Parents’ level of education was also collected. Results indicated a negative correlation between parent control and structure and adolescent academic achievement. As perceived control and structure went up academic achievement went down. Another finding was an association between parents’ level of education and students’ academic achievement. Parents with higher levels of education had children with higher levels of academic achievement. Overall, results from these studies indicate that a relationship does exist between parental involvement and academic achievement. Furthermore, the important role that parent involvement has on academic achievement in adolescent students is emphasized, thus suggesting that positive parent involvement may be a potential solution to minimizing negative outcomes in teen parents by supporting academic achievement, a precursor to academic success, within that population.
Parenting Style and Practices

One way academic success can help reduce the negative outcomes of teenage pregnancy and parenting is by improving parenting skills. Academic success of parenting moms has been linked to parenting style and practices (Hesketh et al., 2007; Sullivan et al., 2011; Tamis-LeMonda et al., 2009). Research conducted by Tamis-LeMonda et al. (2009) assessed maternal control, sensitivity, and maternal education in relation to children’s behavior outcomes. The authors hypothesized that lower academic success would be related to maternal control and lead to negative outcomes in children whereas higher academic success would be related to maternal sensitivity leading to positive outcomes in children. One hundred nineteen African American mothers with a mean age of 34 years old participated in the study. Children were in first and second grade. Approximately 30% had a high school education and the remainder had college degrees. Researchers met with the parents and observed a cooking task with parent and child. Mothers also completed a questionnaire on children’s problem behaviors. Results from the study found that parents with a college degree displayed more sensitive and nurturing parenting behaviors compared to mothers with a high school diploma who displayed more controlling parenting behaviors, thus supporting the hypothesis. Tamis-LeMonde et al. (2009) explained that although the study was conducted on African American mothers and their children, the parenting issues highlighted are likely linked to socioeconomic status and not race. Findings from this study show a relationship between academic
success and parenting style with higher education level being connected to maternal sensitivity as well as positive outcomes in children.

In studies done by Hesketh et al. (2007) and Sullivan et al. (2011) relationships between academic success and parenting practices were found. Hesketh et al. (2007) correlated maternal education level to television viewing. Researchers administered questionnaires to parents of 1,484 elementary school children regarding maternal education levels, amount of time children spend watching television and other aspects of the family television environment. Results indicated that children of mothers with lower levels of education spent more time watching television than children of mothers with higher education levels. Hesketh et al. (2007) explored the differences in television watching explaining that mothers with less education may use television as a form of entertainment for children. Similarly, Sullivan et al. (2011) looked at the environmental context, focusing on cognitive stimulation and emotional support existing in the home.

Existing data from the Child Development Supplement of the Panel Study of Income Dynamics encompassing 3,193 mothers and their children was utilized. The Home Observation for Measurement of the Environment (HOME) (Caldwell & Bradley, 1984) was used to assess the home environment. Sullivan et al. (2007) found that, although overall adolescent mothers scored lower on the home environment than older mothers, when adolescent mothers continued their education there was no longer a relationship between age at birth and quality of the home environment, suggesting that academic success mediates negative consequences of teenage childbearing. Both studies illustrate
how less maternal education can have important effects on parenting practices and how higher educational attainment can alter the everyday activities of children. Findings from both studies emphasize the important role that educational level can play in parenting styles and practices with higher educational attainment proving to be positively correlated to more beneficial parenting styles and practices.

**Impact on Children’s Development**

Educational attainment has not only been linked to parenting styles and practices, it has also been linked to children’s development. Low maternal education, in general, has been shown to have significant negative influences on a child’s development, including health, mental health, social emotional development and educational outcomes (Essex et al., 2006; Klein, 2005; Ryan-Krause et al., 2009; Sullivan et al., 2011). Magnuson et al. (2009) explain that maternal education has been linked to children’s language, cognitive, and academic development. The authors conducted a study comparing maternal education to young children’s language skills in a sample of 1,364 mother-child dyads. At 24 months of age the authors surveyed mothers on educational attainment. Education levels varied from seventh grade to a doctoral degree. At 36 months the children were assessed for school readiness and language skills. The School Readiness Composite of Bracken Basic Concept Scale (Bracken, 1984) and the verbal and expressive subscales of the Reynell Developmental Language Scales were used for assessing the children. The quality of the home environment was also measured at 15 and 36 months with the Home Observation for Measurement of the Environment (HOME)
(Caldwell & Bradley, 1984). Results indicated a positive relationship between mother’s education and improvements in children’s language development and home environment. Higher maternal education indicated more learning materials in the home and higher levels of responsiveness by mothers. Children of mothers with higher education had better vocabulary comprehension and language expression.

Similarly, Suizzo and Sapleton (2007) conducted a study looking at parent involvement in young children’s education activities in relation to maternal education across ethnic groups. The authors surveyed 12,213 parents of kindergarten children who were participating in the Early Childhood Longitudinal Study Kindergarten Class of 1998-1999. Parents were surveyed on family background, which included maternal education, parental expectations, parent-child activities, and family routines. Results showed that higher maternal education across ethnicities resulted in more long-term educational expectations for children. In addition, more maternal education was positively associated with parent-child home activities. The authors concluded that maternal education plays a more important role than ethnicity for parent-child education activities.

These studies described imply that the more education a mother attains, the more importance the mother places on educational attainment and educational activities for her children. Due to the fact that children of teen mothers tend to lack cognitive, language and social emotional skills, have low scores on standardized tests, are more likely to repeat a grade, and are less likely to complete high school (The National Campaign,
2010) results from these studies further support the importance that should be placed on teen mothers graduating high school and furthering their education.

Conclusively, both academic achievement and success are not only critical for developmental and socio-economical well being of the teen mom; they are equally as critical for the developmental and socio economical well being of her child (Chuang et al., 2011; Gipson et al., 2008; Hoffman & Maynard, 2008; Hotz et al., 1997; Klein, 2005; Kost et al., 1998; The National Campaign, 2010; Sullivan et al., 2011). Knowing this, it is extremely important to identify what, if any, other variables influence academic success and achievement amongst this specific and prevalent population.

**Father Involvement**

Father involvement may be a variable that can reduce the potential negative outcomes of teen pregnancy and parenting on teen mothers and their children. Research on father involvement has steadily increased over the last three decades. Over this time, many social changes have occurred that have affected the way that fathers, mothers, and families are conceptualized (Cabrera et al., 2000). The role of the father has undergone an extreme transformation; from the colonial father, to the working father that provides for the family yet is rarely seen, to the more modern father that is involved with the family and children, to the father as a co-parent, and now in some cases, to the father as the primary caregiver.

Research has demonstrated that father involvement is directly related to sexual activity and teenage pregnancy in daughters (Ellis et al., 2003; Katz & Van Deer Kloet,
In a study done by Ellis et al. (2003), teenage girls with an absent father were much more likely to engage in early sexual activity and become pregnant. In contrast, Katz and Van Der Kloet (2010) found that teenage girls who had responsive fathers in their lives, fathers they felt close to, that offered emotional support, and whom they could communicate with, were more likely to refuse unwanted sex, show a strong sense of sexual assertiveness, and have higher levels of self worth. These studies illustrate the role of father involvement in teen girls’ sexual activity and choices.

Father involvement has also been directly related to academic success in adolescent girls. Flouri (2006) looked at mothers’ and fathers’ interest in their child’s education and the effects on the child’s academic success. The sample consisted of 1737 males and 2033 females that were all part of a continuing longitudinal study, The 1970 British Cohort Study (BCS70) (Flouri, 2006). At age 10 teachers reported on mothers’ and fathers’ interest in their child’s education, participants also completed two questionnaires: one assessing self-esteem and the other internal locus of control. Lastly, at age 26 the highest level of education was recorded. Results from this study indicated that children with the highest level of academic success at age 26 were those whose parents were reported to be interested in their education at age 10. Results also showed a relationship specifically between fathers and daughters in which only the daughters’ academic achievement, not the sons’, was affected by the fathers’ interest in their education. Furthermore, the association found between fathers’ interest in their daughters’ education was positive, as the fathers’ interest in their daughters’ academic
achievement went up so did the daughters’ level of academic success. In addition, Krohn et al. (2001) looked at the effects of absent fathers on their daughters’ college enrollment. Through analyzing existing research, findings from this study suggest that father absence negatively affects college enrollment in girls by affecting several other aspects of their lives such as cognitive development, school performance, and teenage pregnancy. These studies emphasize the impact that father involvement can have on academic success in daughters.

**Subcomponents of Father Involvement**

Different subcomponents of father involvement such as play, quality of interactions, and father’s interest in education have been associated with important developmental domains of their children such as cognition, motivation, language, social and emotional development, and academic success (Cabrera et al., 2007; Flouri, 2006; Geddes, 2008). For example, the amount and type of play that takes place between a parent and a child has been shown to have different effects on children’s development (Flanders et al., 2009). According to Lewis and Lamb (2003), paternal play styles have been linked to IQ levels, motivation, and language development in children. Quality of interactions, a component of father involvement, was the focus of one study done by Cabrera et al (2007). A sample of 290 intact families including a mother, father, and child were recruited through Early Head Start sites in the US. Father child interactions were observed and children’s cognitive, language, and social emotional development were assessed at ages two, three, and Pre-K by a trained tester. This study found an association
between positive father-child interactions and healthy social and emotional development in children specific to emotional regulation (Cabrera et al., 2007). In addition, Flouri (2006) focused on the subcomponent of father involvement in their daughter’s education. Father involvement was measured through teacher report of the father’s interest in their daughter’s education. Results showed a positive correlation between fathers’ interest in their daughters’ education in the elementary years and daughters’ academic success later in life. Findings from these studies emphasize the important influence that a variety of subcomponents of father involvement can have on several areas of children’s development, including academic success. Due to the broad scope that father involvement encompasses, it is important to understand the impacts that different subcomponents can have on children’s development including whether or not one subcomponent, such as closeness, may be a stronger predictor of a child’s developmental outcome than another subcomponent, such as amount of time spent together.

**Short and Long Term Effects**

Lastly, in addition to father involvement in childhood affecting many aspects of child development it also has both short and long term effects (Geddes, 2008; Lewis, 2003). It is crucial to understand and acknowledge that father involvement in childhood can influence and effect outcomes through adulthood. The quality of father involvement, for example, has been shown to have many effects on child development but it has also been shown to last all the way into adulthood and have effects on adult adjustment as well. Lewis (2003) investigated whether or not a correlation could be found between
adult men’s reports of their childhood, including their relationships with their parents, and their own paternal involvement and sensitivity. They concluded that male children who experience secure relationships with their parents grow into adults who are more sensitive to their children’s needs and more involved in their children’s lives. In addition, Geddes (2008) reported that the level of closeness between a father and a child is positively correlated to educational and occupational outcomes. Similarly, Flouri and Buchanon (2004) found that children who had involved fathers at age 7 had higher educational success at age 20. These results indicate that father involvement is not only an important and influential factor regarding child development but it is also an important and influential factor regarding adult development. Due to the impact and long lasting effects that father involvement in childhood has on developmental outcomes it is important to look at father involvement during childhood.

**Spurious Variables**

Direct relationships can be noted between father involvement and child development as well as later adult development (Cabrera et al., 2007; Flanders et al., 2009; Flouri, 2006; Flouri & Buchanon, 2004; Geddes, 2008; Lewis, 2003; Lewis & Lamb, 2003). Direct relationships can also be noted between father involvement and sexual activity, teen pregnancy, and academic achievement and success in adolescent girls (Ellis et al., 2003; Flouri, 2006; Krohn et al., 2001; Katz & Van Deer Kloet, 2010; Williamson, 2004). However, there is potential for variables that may inadvertently affect the results of these relationships and for obvious reasons should be acknowledged.
Spurious variables are factors that are related to one or more of the factors in the model that may be inadvertently affecting results. For example, one variable that has been closely associated with both academic achievement and father involvement is socio-economic status (Cabrera et al., 2007). Generally, positive correlations exist between SES and both academic achievement and father involvement. Cabrera et al. (2007) found that the father’s level of income was a predictor of several developmental domains in children such as language and social and emotional development. The study also found that the level of education and level of income of fathers are both key predictors of father involvement with higher levels of education and income resulting in more positive father-child engagement.

In addition, SES alone has been found to influence academic achievement. Young et al. (2011) explored SES, perceived social support, and generation to attend college as predictors of academic achievement. Participants consisted of 93 undergraduate students. The Academic Motivation Scale (AMS), the Hollingshead Two-Factor Index of Social Status, and the Multidimensional Scale of Perceived Social Support (MSPSS), along with demographic data were used. This study concluded that all variables including SES, perceived social support, and generation of college were predictive of academic achievement for African American students. Students who reported higher levels of SES, perceived social support, and generation of college had higher levels of academic achievement. This study supports the notion that SES influences academic achievement in students. Controlling for SES, ensures that the relationship between father involvement
and academic achievement is not spurious. As a result many studies involving father involvement and child outcomes control for socio-economic status (Sarkadi et al., 2007).

Furthermore, academic achievement in parenting teen girls may be influenced by factors other than father involvement (Barriga et al., 2002; Resnick et al., 1997; Young et al., 2011). For example, Resnick et al. (1997) found that appearing older or repeating a grade was associated with higher levels of emotional distress in junior high and high school students, which can indirectly effect academic achievement. Attention and behavioral problems have been linked to academic achievement in teens as well (Barriga et al., 2002). In addition, the availability of family and social support can impact academic motivation and achievement. As in the Young et al. (2011) study, an association between perceived social support, motivation, and academic achievement in African American college students was discovered. These studies point out that there are psychological, social, and structural variables that do exist and are associated with academic achievement. Additional factors and confounders specific to the population of teen moms that should not be overlooked are age of teen mother, age of the father of the child, age of the child, involvement of the child’s father, and external support of family members such as parents and grandparents. It is important to recognize these confounding variables and control for them accordingly.

Summary

Teenage pregnancy and childbearing exists all around the world and is quite prevalent in the Unites States, yet remains to be an understudied population (Klein, 2005;
The National Campaign, 2010). There are strong societal impacts that stem from teenage pregnancy and childbearing that, if understood and addressed, could benefit the teen mom, the child of the teen mom, and society as a whole. Academic achievement is an important variable that is related to academic success in parenting teen moms. Higher academic success has been linked to maternal sensitivity, positive parenting practices, and positive outcomes in children (Magnuson et al., 2009; Suizzo & Sapleton, 2007; Sullivan et al., 2011; Tamis-LeMonde et al., 2009). Women who have children when they are teenagers tend to have lower levels of education, many drop out of high school and most of those will never return to graduate (Hoffman & Maynard, 2008). The odds are against teen moms when it comes to academic achievement and success. This is reflected in the school drop out rate around the country. In California alone there is a 70% school drop out rate for pregnant and parenting teens (California Department of Education, 2013).

Studies have shown that father involvement can affect both academic achievement and academic success in girls as well as sexual activity among adolescent girls (Cabrera et al., 2007; Ellis et al., 2003; Flouri, 2006; Flouri & Buchanan, 2004; Geddes, 2008; Katz & Van Der Kloet, 2010; Krohn & Bogan, 2001; Williamson, 2004). These findings suggest that father involvement may play a critical role in academic achievement and success amongst teen moms and further more, highlight the importance of understanding father involvement in relation to academic achievement in parenting teen girls. This is not to say that mothers do not play an important role as well. In fact
there is much research emphasizing the important role of mothers in virtually all aspects of child development. Still, father involvement is less studied, yet equally important to understand. In order to address the topic further, the current study aimed to answer several questions specific to father involvement and academic achievement in parenting teen girls.

Does a relationship exist between father involvement and academic achievement in parenting teen girls? Is closeness to a father a stronger predictor of academic achievement in parenting teen girls than time spent with a father? Lastly, will the relationship between father involvement and academic achievement in parenting teen girls remain significant after controlling for influential variables to the specific population of parenting teen moms?
Chapter 3

METHODS

The aim of the current study was to investigate father involvement and its association with academic achievement in parenting teen girls. More specifically, the purpose was to test for statistically significant relationships between father involvement and academic achievement among this sample of 25 parenting teen moms.

Research Questions

Three specific research questions guided the data collection and analysis process. First, does a relationship exist between a parenting teen girl’s recollection of her father’s involvement and her academic achievement in high school? Second, is closeness to a father a stronger predictor of academic achievement in parenting teen girls than time spent with a father? Lastly, will the relationship between father involvement and academic achievement in parenting teen girls remain significant after controlling for influential variables, such as socio-economic status, age of the teenage mother, age of the teenage mother’s child, age of the biological father to the infant, involvement of infant’s father, and family support?

The primary hypothesis for the current study is that perceived father involvement, among parenting teen moms, throughout their childhood will be significantly and positively correlated to their academic achievement in high school. A second hypothesis is that closeness, as a subcategory of father involvement, will be a stronger predictor of the association between father involvement and academic achievement in parenting teen
girls than the amount of time spent together. Finally, a third hypothesis is, after controlling for possible confounding variables, father involvement will remain to be a strong predictor of academic achievement in parenting teen girls.

**Research Design**

The current study consisted of a correlational quantitative design. The measure of father involvement was correlated with variables about academic achievement. Since data were all collected at the same time no conclusions about causality can be inferred.

**Participants**

In the present study participants consisted of 25 teenage mothers with an age range of 15-19 years ($M = 18.08$ years, $SD = .81$). Participants were all students attending one of four different continuation high schools located in Northern California. Children of the teen mothers had a mean age of .87 years ($SD = .87$, range .01-3). Fathers of the children had a mean age of 20.08 years ($SD = 2.21$, range 16-24). Included in the demographics page that all participants completed was a question about SES. Participants were asked to identify whether or not they had ever qualified for reduced school lunch. The majority of participants, 24 out of 25, reported having qualified for reduced school lunch at some point in their life.

**Measures**

**Demographics**

The demographic survey that all participants completed along with the questionnaires addressed several potential confounding variables present in the current
study. All questions included on the demographics page were as follows; age of participant, age of their child, age of the father of the child, is the father of the child involved (Mean = 0.80, SD = 0.41), does the father of the child live in the home (Mean = 0.52, SD = 0.51), do the mother and the child live alone (Mean = 0.08, SD = 0.28) do the mother and the child live with family members such as parents or grandparents (Mean = 0.76, SD = 0.44), has the mother ever qualified for reduced school lunch (Mean = 0.92, SD = 0.28) (see Appendix F).

**Father Involvement**

To assess the teen mother’s perceptions about level of father involvement the Father Involvement Scale (FIS) (Finley & Schwartz, 2004), the Nurturant Fathering Scale (NFS) (Finley & Schwartz, 2004) and the In Home Questionnaire borrowed from the National Study of Adolescent Health (Harris et al., 2009) were used. All of these tools are designed to measure father involvement through an adolescent’s or young adult’s point of view. For the sake of the current study, participants were asked to reflect upon their fathers’ involvement through their childhood, specifically birth to 12 years old. The FIS (Finley & Schwartz, 2004) and the NFS (Finley & Schwartz, 2004) consist of questions referring to the past whereas the In Home Questionnaire (Harris et al., 2009) consists of questions referring to the present. For the sake of this study questions from the In Home Questionnaire (Harris et al., 2009) were changed to past tense in order to reflect the adolescent’s or young adult’s childhood years.

The FIS (Finley & Schwartz, 2004) is a survey in the form of a 5-point Likert-type scale and addresses the adolescent’s and/or young adult’s perception of their father’s
involvement in their life throughout their childhood 0-12. The survey consists of 20 questions. Possible scores range from 20 to 100. Each question focuses on a different domain of father involvement and is designed to measure the extent of father involvement in each specific domain, with 1 equating to never involved to 5 equating to always involved (see Appendix C). Domains include intellectual development, emotional development, social development, ethical/moral development, spiritual development, physical development, career development, developing responsibility, and developing competence. Other areas of father involvement addressed in the questionnaire include leisure/fun/play, financial support, sharing of activities/interests, mentoring/teaching, caregiving, being protective, advising, discipline, school/homework, and companionship. The FIS is designed to measure reported father involvement, that is father involvement from the adolescent or young adult’s perspective, as well as desired involvement, that is how involved the adolescent or young adult would have liked her father to be (Finley & Schwartz, 2004). For the sake of the current study only the reported involvement was measured and the desired involvement was omitted (alpha = .97; \( M=71.24; \) \( SD=20.04 \)).

The Nurturant Fathering Scale (Finley & Schwartz, 2004) also addresses father involvement from the adolescent or young adult’s perspective. Like the FIS (Finley & Schwartz, 2004), the NFS (Finley & Schwartz, 2004), is a survey in the form of a 5-point Likert-type scale with a rating of 1 equating to always and a rating of 5 equating to never (see Appendix D). This survey consists of 9 questions. Possible scores range from 9-45 (Finley & Schwartz, 2004). Each question characterizes the relationship between the
child and the father and is designed to measure the extent of father involvement in different areas of the father/daughter relationship. Areas addressed include support, energy, ability to confide in, time spent together, closeness, and psychological presence (alpha = .95; $M=29.44$; $SD=9.91$).

The In Home Questionnaire (Harris et al., 2009) consists of 18 categories of father involvement. The last two categories, 17 and 18, contain 11 subcategories equaling a total of 38 questions presented in a 5-point Likert-type scale format. Possible scores range from 38 to 190. This measure addresses several aspects of father-child relationships (Harris et al., 2009). The current study only focused on the items measuring time spent together totaling 9 questions with a possible score ranging from 10 to 100 (see Appendix E). A rating of 1 equates to rarely and a rating of 5 equates to often (alpha = .88; $M=29.20$; $SD=10.50$).

In all original measures, FIS (Finley & Schwartz, 2004), NFS (Finley & Schwartz, 2004), and the In Home Questionnaire (Harris et al., 2009), participants are asked to identify the father figure they will refer to throughout the survey. In the current study participants were not asked to identify a specific father figure, rather, they were asked to answer all questions in all measures regarding the one person they think of as having been the most important father figure in their life. This information was stated at the top of all scales. In addition, participants were asked to respond to all questions referring to their fathers’ involvement throughout childhood, specifically birth to 12 years old.
Academic Achievement

In this study current grade point average (GPA) \((M = 3.18, SD = .77)\) and overall GPA \((M = 2.36, SD = .67)\), along with standardized test scores, consisting of CHSEE English exam scores \((M = 318.5, SD = 121.47)\) and CHSEE Math exam scores \((M = 326.91, SD = 99.56)\), were used to assess the teen mothers’ academic achievement. STAR Standardized Test scores were omitted due to lack of scores for all participants. Grade point averages and standardized test scores of all the participants were collected through the high school administration office. Permission to obtain students’ GPA and standardized test scores was included in the consent and assent form for the parent or guardian of the minor and the minor.

Procedures

In the present study, parenting teen girls were recruited from four different continuation high schools located in Northern California. First, letters of approval from the principal from each high school were requested and collected by the researcher. Next, a liaison between the researcher and the teen parents was contacted from each school. This was necessary in order to locate the parenting teen girls from each school. Once the parenting teen girls from each high school were identified by the liaison, flyers explaining the current study, as well as a parent/guardian consent form, were sent home with the students in an envelope (see Appendix A). Students were asked to return the parent/guardian consent forms to the liaison. A minor assent form was given to and collected from all participants prior to administration of questionnaires (see Appendix B).
The consent and assent forms included a description of what the participants would be asked to do, benefits they would receive for participating, any risks they may be exposed to, and how those risks would be minimized by the researcher. In addition, information about missing class time in order to participate as well as permission to access student GPA and test scores was also included.

Once participation was confirmed, through signed and returned consent forms, the students were given a specific date and time to meet in the cafeteria to complete the survey measures. Permission for the students to miss class in order to participate in the study was requested from the principal of the high school. Prior to beginning the questionnaires participants were given assent forms, which they read and signed. Participants were informed through the assent form that they did not have to answer any question if they did not want to, they could withdraw from the study at any time and they did not have to complete the questionnaires if they did not want to. In addition, information was provided to the participants through the assent form about the school counselor and/or district case manager in the circumstance that they felt they needed to discuss emotions relating to the questions in the study.

Before beginning the questionnaires participants were directed to read the instructions at the top of each page. Participants were also directed to answer all questions regarding the one person they think of as having been the most important father figure in their life throughout the ages of 0-12.
GPAs and standardized test scores were collected for each participant through the high school administration office. A letter from the principal stating that disclosure of this information was permitted was provided to the high school administrative office. Copies of signed consent and assent forms were provided to the high school administrative office prior to receiving any student information. All procedures pertaining to the present study were approved by human subjects.
Chapter 4

RESULTS

The present study aimed to answer three specific research questions. First, does a relationship exist between a parenting teen girl’s recollection of her father’s involvement between the ages of 0-12 and her academic achievement in high school? Second, is closeness to a father a stronger predictor of academic achievement in parenting teen girls than time spent with a father? Lastly, will the relationship between father involvement and academic achievement in parenting teen girls remain significant after controlling for influential variables, such as age, SES, age of the child, involvement of the child’s father, and family support?

Hypothesis Testing

Hypothesis One

The first hypothesis was that perceived father involvement, among parenting teen moms, throughout their childhood would be significantly and positively correlated to their academic achievement in high school. The Father Involvement Scale (Finley & Schwartz, 2004) was used to measure overall father involvement. Current semester GPA, overall GPA, CHSEE English scores, and CHSEE Math scores were used to measure academic achievement.

As seen in Table 1, the first hypothesis was not supported with Pearson’s correlation coefficients showing no significant relations between overall father involvement and academic achievement. Overall father involvement was not significantly
correlated to current semester GPA (r= .01), overall GPA (r= .24), CHSEE English scores (r= .13), and/or CHSEE Math scores (r= -.21). However, an additional finding was recognized through this correlation analysis. As seen in table 1, a significant and positive correlation was found between overall GPA and closeness (r=.42, p<.05).

Table 1

*Correlation Matrix for Relations Between Primary Variables of Interest (N=25)*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CGPA</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. OGPA</td>
<td>.58**</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. CHE</td>
<td>-.06</td>
<td>-.23</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CHM</td>
<td>-.29</td>
<td>-.21</td>
<td>.38</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. CN</td>
<td>.05</td>
<td>.42*</td>
<td>-.14</td>
<td>-.02</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. TS</td>
<td>-.16</td>
<td>.12</td>
<td>-.06</td>
<td>-.270</td>
<td>.76**</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>7. OI</td>
<td>.01</td>
<td>.24</td>
<td>-.13</td>
<td>-.21</td>
<td>.84 **</td>
<td>.76**</td>
<td>—</td>
</tr>
</tbody>
</table>

*p<.05. **p<.01
Note. CGPA-Current GPA, OGPA-Overall GPA, CHS-CHSEE English Exam Scores, CHM-CHSEE Math Exam scores, CN-Closeness, TS-Time Spent, OI-Overall Involvement

**Hypothesis Two**

The second hypothesis was that closeness, as a subcategory of father involvement, would be a stronger predictor of the association between father involvement and academic achievement in parenting teen girls than the amount of time spent together. The Nurturant Fathering Scale (Finley & Schwartz, 2004) was used to measure closeness, the
In Home Questionnaire borrowed from the National Study of Adolescent Health (Harris et al., 2009) was used to measure time spent together, and overall GPA was used as the measure for academic achievement due to the significant correlation found in the first hypothesis test between overall GPA and closeness to a father.

A multiple regression analysis was used to determine whether or not one subcategory of father involvement, closeness or amount of time spent together, was a stronger predictor of father involvement on academic achievement. As seen in Table 2, this hypothesis was supported. As expected the subcomponent of closeness ($\beta = .78; p = .01$) remained significant while the subcomponent of time spent together ($\beta = - .48; p = .11$) did not show significance.

Table 2

**Multiple Regression Analysis for Subcategory Predicting Father Involvement**

<table>
<thead>
<tr>
<th></th>
<th>$\beta$</th>
<th>SE</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closeness</td>
<td>.78</td>
<td>.17</td>
<td>.01</td>
</tr>
<tr>
<td>Time Spent</td>
<td>-.48</td>
<td>.18</td>
<td>.11</td>
</tr>
</tbody>
</table>

Note *p < .05, **p < .01

$F = 4.014$, Adjusted $R^2 = .201$

**Hypothesis Three**

Finally, the third hypothesis was that father involvement would remain to be a strong predictor of academic achievement in parenting teen girls after controlling for confounding variables. Due to the lack of significant correlation between overall father
involvement and academic achievement this hypothesis could not be tested. Since correlation is needed to justify inclusion in a regression analysis, and overall father involvement measured with the Father Involvement Scale (Finley & Schwartz, 2004) did not show a significant relationship to academic achievement measured with current GPA, overall GPA, and CHSEE exam scores, a regression analysis was not needed to further investigate the relationship after controlling for confounding variables. However, for the purpose of this thesis a hierarchal regression analysis was conducted to predict academic achievement from father involvement after controlling for confounding variables, and as expected showed no significant findings [F(4, 20) = 2.14; p = .11].
Chapter 5

DISCUSSION

Teenage pregnancy and childbearing is prevalent all around the world and amongst westernized countries, the Untied States has the second highest rate of teenage pregnancy (California Department of Public Health, 2009). Teenage mothers are a unique population with many unique challenges and associating factors. With the odds against teenage mothers to do well academically, the overall implications of that, and the overall impact that this unique population can have on society as a whole, it is important to understand what, if any variables influence and relate to academic achievement in this specific population. Past research has shown father involvement to be related to academic success and achievement in girls (Cabrera et al., 2007; Flouri, 2006; Geddes, 2008; Ho Sui-Chu & Williams, 1996; Krohn et al., 2001), yet little research exists with a focus on father involvement and academic achievement in parenting teen girls. The current study, taking past research into consideration, looked at father involvement and academic achievement in the specific population of parenting teen girls.

This study aimed to answer the following questions: (1) Does a relationship exist between overall father involvement and academic achievement in parenting teen girls? (2) Is closeness to a father a stronger predictor of academic achievement in parenting teen girls than time spent with a father? (3) Will the relationship between father involvement and academic achievement in parenting teen girls remain significant after controlling for influential variables to the specific population of parenting teen girls?
First, it was anticipated that overall father involvement would have a significant relationship with academic achievement in parenting teen girls. This hypothesis was not supported. Through the correlation analysis conducted results indicated that overall father involvement did not show a significant relationship with academic achievement in parenting teen girls. Past studies have shown significant relationships to exist between father involvement and academic success and achievement in girls as well as parental involvement and academic success and achievement in girls (Flouri, 2006; Ho Sui-Chu & Williams, 1996; Hill & Tyson, 2009; Karbach et al., 2013; Krohn et al., 2001). Based on previous findings it was expected that a significant relationship would exist between overall father involvement and academic achievement in parenting teen girls. The small sample size could be the cause of lack of significance due to the minimal power present. With a sample of 25 participants the power to detect significant relationships was low.

Second, it was anticipated that closeness, as a subcomponent of father involvement, would be a stronger predictor of the relationship between father involvement and academic achievement in parenting teen girls compared to the subcomponent of amount of time spent together. Results from the multiple regression analysis conducted indicated that the subcomponent of closeness was significant while the subcomponent of time spent together was not, thereby supporting the hypothesis. Closeness as a subcategory of father involvement was a stronger predictor of the relationship between father involvement and academic achievement than amount of time spent together. From this result, it can be concluded that closeness between a father and a
teenage parenting daughter is a stronger predictor of academic achievement than amount of time spent together.

This conclusion supports the notion that the father/father figure does not need to be in the home in order to have a positive impact on their daughter. This is an important finding due to the many different family structures that exist in the modern family and the commonality of the nonresidential father. Furthermore, this finding could be utilized to educate parents of teenage parents by providing closeness to a father/father figure as a variable of focus in supporting the academic achievement of parenting teen moms. More specifically, contributing to the understanding of the influence and impact that closeness to a father/father figure could have on the academic achievement of a parenting teen mom compared to the influence and impact of amount of time spent together.

Moreover, past studies have shed light on the different subcomponents that father involvement encompasses and ways in which those components can be related to children’s development (Cabrera et al., 2007; Flouri & Buchanan, 2004; Geddes, 2008; Katz & Van Der Kloet, 2010; Paquette, 2004). Statistically significant relationships have been found to exist between different subcomponents of father involvement and academic success as well as academic achievement in girls (Cabrera et al., 2007; Flouri, 2006; Geddes, 2008; Ho Sui-Chu & Williams, 1996). By identifying that closeness to a father/father figure is a stronger predictor of academic achievement in parenting teen girls than amount of time spent with a father/father figure, the current study has built off of past research and furthered the investigation by looking at the influence amongst
subcomponents of father involvement while focusing specifically on the population of
teen moms.

Results also revealed a relationship between overall GPA of teen mothers and
closeness between the teen mother and their father/father figure. This finding further
emphasizes the importance of closeness as a subcomponent of father involvement but
additionally, can be beneficial in supporting parenting teen girls in the areas of academic
achievement and success. By identifying a relational factor to academic achievement in
parenting teen girls several important variables can be affected. For example, as
previously stated, the odds are against teen moms when it comes to academic
achievement. Teenage mothers tend to have lower levels of education, many dropout of
high school and most of those will never return to graduate (Hoffman & Maynard, 2008).

With the knowledge that closeness to a father/father figure is correlated to an increase in
academic achievement in parenting teen girls, resources could be made available to the
teen mother, parents of teen mothers, programs designed to support parenting teens, and
teachers with an emphasis on establishing and maintaining closeness between a teen
mother and her father as well as the benefits of that.

The child of the teen mother is another important variable that can be positively
affected by identifying closeness to a father/father figure as a factor correlated to
academic achievement in parenting teen girls. Low maternal education, in general, has
been shown to have significant negative influences on a child’s development, including
health, mental health, social emotional development and educational outcomes (Essex et
al., 2006; Ryan-Krause et al., 2009). The current finding indicates that closeness to a father/father figure is correlated to academic achievement in parenting teen girls. This information could positively impact many developmental areas of the child of the teen mother that previously were related to low maternal education such as those previously mentioned; health, mental health, social emotional development and educational outcomes through supporting teen mothers’ academic achievement and thereby increasing the potential for academic success.

Lastly, this finding could positively impact society as a whole by providing information that could potentially support the teen mom in graduating high school. It is evident that teen moms impact society. Not only are teen moms less likely to work, more likely to make less income at a job, and are more dependent on public assistance (Hotz et al., 1997), children born to teen mothers are more likely to suffer from child abuse, become involved in CPS, and end up in Foster Care (George & Lee, 1997). These are all variables that impact society. One of the primary reasons that teen mothers may impact society is through dropping out of school and the long term implications of that. Findings from the current study can be used to support teen moms in completing high school and possibly furthering their education. By identifying closeness to a father/father figure as a relational factor to academic achievement in teen moms, important information supporting academic achievement could be offered to teen mother, parents of teen mothers, programs designed to support parenting teens, and teachers, ultimately
minimizing the societal impact of teen moms. Essentially, this information could benefit the teen mom, her child, and society as a whole.

Finally, it was anticipated that the relationship between father involvement and academic achievement in parenting teen girls would remain significant after controlling for influential variables to the specific population of parenting teen moms. This hypothesis was not supported. Due to the first hypothesis lacking significance (overall father involvement did not show a significant relationship with academic achievement in parenting teen girls) it was not necessary to run the analysis for the final hypothesis. However, for the purpose of the current study an analysis was conducted and as expected showed no significant results. Again, a larger sample size may have lead to significant results in the first hypothesis, which would have enabled the analysis in the final hypothesis to be legitimate.

**Limitations**

There are some important limitations to the current study. First, the analyses conducted were dependent upon a larger sample size. The sample size of the current study consisted of 25 participants, leading to lack of power to detect differences. The small sample size lead to low power to detect significant relationships, so the relationship between overall father involvement and academic achievement, as measured by GPA, which was .24, failed to reach significance. Secondly, both the Father Involvement Scale (Finley & Schwartz, 2004) and the Nurturant Fathering Scale (Finley & Schwartz, 2004) are surveys which require recall of the participants. By utilizing recollection as a primary
source to measure father involvement potential for the reliability and/or internal validity of the measures to be decreased is introduced. Thirdly, the analyses used are correlation analyses. Any statistically significant results show associations and relationships but ultimately lack any causal information.

Furthermore, standardized test scores, which were added to current GPA, overall GPA, and CHSEE exam scores, for the purpose of making the measure of academic achievement more robust, had to be omitted due to missing data. Meaning that the dependent variable of academic achievement lacked an additional component of measurement initially intended to be incorporated, therefore limiting the robustness. In addition, utilizing minors as participants presents unique challenges. Obtaining consent forms from parent/guardians of the minors was a difficult task. Due to the challenge of receiving consent forms from parent/guardians of minors the sample was made up of primarily older teenage mothers with an age range of 15-19 (mean age = 18.08 years, SD = .812). The demographics of the sample limit the ability to generalize the findings to a wider spectrum of teenage mothers. Finally, sexual abuse by fathers to daughters in childhood and adolescents has been related to early sexual activity and onset of pregnancy in teenage girls (Gilson & Lancaser, 2008; Yampolsky, Lev-Wiesel, & Ben-Zion, 2010; Young, Deardorff, Ozer, & Lahiff, 2011). This presents a possible confound in that abusive fathers might have spent a lot of time with their daughters, however that instance would be expected to be negatively related to academic achievement. The
current study did not control for history of abuse and therefore presents a significant limitation, which is important to acknowledge.

**Suggestions**

The present study initiated a first look at father daughter relationships and academic achievement within the specific population of parenting teen girls. Future studies could build off of the results of the current study and look at what contributes to a close relationship between a father and teenage parenting daughter. Any identified contributors could be used to educate fathers of pregnant or parenting teenage daughter with the goal in mind of creating, guiding, and establishing close relationships between fathers and pregnant and/or parenting teenage daughters ultimately leading to positive outcomes for the adolescent mom, her child, and essentially, society.

To take the present study a step further a larger sample size could be recruited. This would lead to more power to detect significant differences. In addition, the age range of the participants could be intentionally widened. A wider age range would enable the results to be generalized to a broader population. Also, the present study was strictly quantitative in nature. A combination of quantitative and qualitative analyses would be beneficial in the sense that the reliability of the data and applicability of the results would be increased. To further increase the reliability of the results, additional potential confounds, such as sexual abuse, could be further investigated and controlled. Furthermore, the present study allowed the participants to recall from their childhood their biological father or a father figure. They were not asked whom they recalled. It
would be important to investigate the percentage of participants that recalled their biological father vs. a father figure. Absent fathers are not an uncommon component of modern day family structures and could be an important variable in future studies dealing with pregnant and parenting teen girls. So, future studies could focus on involvement of biological fathers and father figures and the similarities and differences that exist when looking at the relationship with a teenage daughter.

**Conclusion**

Despite the fact that research on father involvement has steadily increased over the last three decades (Cabrera et al., 2000), there remains a lack of emphasis regarding their direct or indirect effects on parenting teen girls. Teenage mothers are faced with unique challenges and are much less likely to succeed academically which in turn has many negative influences to the teen mother, her child, and society. It is important then to investigate variables that could lead to academic success in this population. It is acknowledged that some resources do exist to support academic achievement and academic success for pregnant and parenting teens, such as school-based teenage parenting programs, however with these resources not often being readily available and often hard to find, additional outlets of support are extremely necessary to identify.

The primary goal of this study was to investigate the relationship between father involvement and academic achievement in parenting teen girls in hopes of understanding how the important variable of father involvement may impact academic achievement in this specific population. Through this study the main finding was that closeness to a
father/father figure was related to academic achievement in teenage mothers. Another
significant finding was that closeness, as a subcategory of father involvement, was a
stronger predictor of the association between father involvement and academic
achievement in parenting teen girls than the amount of time spent together. Findings from
this study can benefit teachers, parents, and pregnant or parenting teen girls by providing
them with an understanding of the role that father involvement plays in academic
achievement amongst parenting teen girls as well as providing a variable of focus when it
comes to providing additional support to teen mothers. Results can also assist in
identifying and building effective programs aimed towards working with teen moms and
the parents of teen moms.
APPENDICES
APPENDIX A

Parental Consent Form

Consent for Your Child to Participate in Research

Your child is being asked to participate in research which will be conducted by Jolene Grace Hardin, a student in the Child Development Master’s Program at California State University, Sacramento. The study will investigate the relationship between father’s involvement and academic achievement in pregnant and parenting teen girls. Jolene runs an Infant and Toddler program that is in partnership with the Teen Parenting Program at Silver Springs High School.

If your child participates they will be asked to complete three questionnaires about their perception of their father’s involvement through childhood. The questionnaire may require up to 30 minutes of your child’s time during school hours to complete. This means that your child may miss up to half an hour of scheduled classes. The school Principal and faculty will be notified of the date and time that participation in the study will occur and the student will be excused for this period of time. In addition to the questionnaires, your child’s GPA and most recent standardized test scores will be obtained through the school administrative office as measures of each student’s academic achievement.

To preserve the confidentiality of your child throughout this research, your child’s name will not be associated with their survey, GPA, or standardized test score. Your child will be assigned a participant number under which all data will be recorded and stored. All
responses to the questionnaires and all information from school records will be kept strictly confidential. When completed, results will be reported in a summary form; no individuals will be identified.

Some of the items in the questionnaires may seem personal, but your child does not have to answer any question if they do not want to. Your child may skip any question, stop at any time, and may withdraw from the study by notifying me. If your child wants to talk to someone about their feelings regarding the questionnaires or their contents they can meet with the school counselor or the district case manager. You may feel that your child’s GPA and/or standardized test scores are personal scores. You do not have to grant permission for these scores to be obtained.

Your child may not personally benefit from participating in this research, but it is hoped that the results of the study will be beneficial for increasing support for pregnant and parenting teen girls, fathers, district high school faculty, and other resource programs and organizations working with teen parents. If you choose to grant permission for your child to participate, and your child agrees to participate as well, your child will be entered into a drawing for a $25 gift certificate to Starbucks as a thank you from me.

If you have any questions about this research, you may contact
(Me) Jolene Grace Hardin at [redacted] or by e-mail at jgh32@saclink.csus.edu
(My Faculty Sponsor) Dr. Kimberly Gordon-Biddle at (916) 278-4831 or by e-mail at kagordon@csus.edu
Your child’s participation in this research is entirely voluntary. If you agree to allow your child to participate, you may later choose to withdraw them at any time. Your signature below indicates that you have read this page and agree to grant permission for your child to participate in the research.

□ I give permission for my child to participate.

□ I give permission for the research to obtain my child’s GPA and Standardized Test Scores

________________________________ ____________________
Name of Minor (Participant)                             Date

________________________________ ____________________
Signature of Parent/Guardian                             Date
APPENDIX B

Assent Form

Agreement to Participate in Research

You are being asked to participate in research which will be conducted by Jolene Grace Hardin, a student in the Child Development Master’s program at California State University, Sacramento. The study will investigate the relationship between father’s involvement and academic achievement in parenting teen girls. Jolene runs an Infant and Toddler program that is in partnership with the Teen Parenting Program at Silver Springs High School.

If you decide to participate you will be asked to complete three questionnaires about your perception of your father’s involvement through childhood. The questionnaire may require up to 30 minutes of your time during school hours to complete. This means that you may miss up to half an hour of scheduled classes. The school Principal and faculty will be notified of the date and time that participation in the study will occur and you will be excused for this period of time. In addition to the questionnaires, if your parent provided permission, your GPA and most recent standardized test scores will be obtained through the school administrative office as measures of each student’s academic achievement.

Answering the questionnaires honestly is important. Some of the items in the questionnaires may seem personal, but you do not have to answer any question if you do not want to. If you need to talk to someone after the questionnaires you can talk to the
school counselor or the district case manager. You may feel that your GPA and/or standardized test scores are personal scores. You do not have to grant permission for these scores to be obtained. It is important to note that no individual will be identified in the reporting of this research. Findings will be summarized across everyone.

Through your participation, you may gain additional insight into how father involvement is related to academic achievement in pregnant and parenting teen girls, or you may not personally benefit from participating in this research. It is hoped that the results of the study will be beneficial for helping better support pregnant and parenting teen girls, fathers, district high school faculty, and other resource programs and organizations working with teen parents.

To preserve your confidentiality throughout this research, you will be assigned a participant number under which all data will be recorded and stored. All responses to the questionnaires and all information from school records will be kept strictly confidential. Only those directly involved in the research will be able to see the survey results.

If you choose to participate you will be entered into a drawing for a $25 gift certificate to Starbucks as a thank you from me.

If you have any questions about this research, you may contact

(Me) Jolene Grace Hardin at [REDACTED] or by e-mail at jgh32@saclink.csus.edu

(My Faculty Sponsor) Dr. Kimberly Gordon-Biddle at (916) 278-4831 or by e-mail at kagordon@csus.edu
Your parent(s) or guardian(s) have already been asked whether it is OK with them for you to participate in this research, but if you decide not to participate, no one will be upset with you. Your participation in this research is entirely voluntary. If you agree to participate, you may later choose to withdraw at any time. Your signature below indicates that you have read this page and agree to participate in the research.

________________________________ ____________________
Signature of Participant                             Date
APPENDIX C

Father Involvement Scale

ID#__________

Please answer these questions regarding the person you think of as having been the most important father figure in your life. Think about the time when you were growing up ages 0-12.

How involved was your father in the following aspects of your life and development?

Please place the appropriate number on the line before each of the following items.

1. Never involved
2. Rarely involved
3. Sometimes involved
4. Often involved
5. Always involved

_____ Intellectual development
_____ Emotional development
_____ Social development
_____ Ethical/moral development
_____ Spiritual development
_____ Physical development
_____ Career development
_____ Developing responsibility
_____ Developing independence
_____ Developing competence
_____ Leisure, fun, play
_____ Providing income
_____ Sharing activities/interests
_____ Mentoring/teaching
_____ Caregiving
_____ Being protective
_____ Advising
_____ Discipline
_____ School/homework
_____ Companionship
APPENDIX D

Nurturant Fathering Scale

ID#__________

Please answer these questions regarding the person you think of as having been the most important father figure in your life. Think about the time when you were growing up ages 0-12.

1. How much do you think your father enjoyed being a father?
   _______A great deal
   _______Very much
   _______Somewhat
   _______A little
   _______Not at all

2. When you needed your father’s support, was he there for you?
   _______Always there for me
   _______Often there for me
   _______Sometimes there for me
   _______Rarely there for me
   _______Never there for me

3. Did your father have enough energy to meet your needs?
   _______Always
   _______Often
   _______Sometimes

4. Did you feel that you could confide in (talk about important personal things with) your father?
   _______Always
   _______Often
   _______Sometimes
   _______Rarely
   _______Never
5. Was your father available to spend time with you in activities?
   ______ Always
   ______ Often
   ______ Sometimes
   ______ Rarely
   ______ Never

6. How emotionally close were you to your father?
   ______ Extremely close
   ______ Very close
   ______ Somewhat close
   ______ A little close
   ______ Not at all close

7. How well did you get along with your father?
   ______ Very well
   ______ Well
   ______ Ok
   ______ Poorly
   ______ Very poorly

8. Overall, how would you rate your father?
   ______ Outstanding
   ______ Very good
   ______ Good
   ______ Fair
   ______ Poor

9. As you go through your day, how much of a psychological presence does your father have in your daily thoughts and feelings?
   ______ Always there
   ______ Often there
   ______ Sometimes there
   ______ Rarely there
   ______ Never there
APPENDIX E

In Home Questionnaire

ID#__________

Please answer these questions regarding the person you think of as having been the most important father figure in your life. Think about the time when you were growing up ages 0-12.

On a scale of 1 to 5, with 1 being rarely and 5 being often, how often did you do the following activities with your father?

1) Go shopping ________
2) Play a sport ________
3) Talk about someone you dated or a party you went to ________
4) Go to a movie, play, museum, or sporting event _____
5) Talk about a personal problem you were having ______
6) Had a serious argument about your behavior ______
7) Talk about your school work or grades ________
8) Worked on a project for school ________
9) Talked about other things you were doing in school _____
10) Eat dinner together______
APPENDIX F

Demographics

ID #__________

How old are you?

How old is your child?

How old is the father of the child?

Is the father of the child involved?

Does the father of the child live in the home?

Do you and your child live alone?

Do you and your child live with family members? If so, who?

Have you ever qualified for reduced priced lunch at school?
REFERENCES


