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# THE ASSOCIATIONS BETWEEN INTER-PARENTAL RELATIONSHIP QUALITY AND PATERNAL CLOSENESS AT AGE 9 ON RISKY SEXUAL BEHAVIOR AT AGE 15

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THE ASSOCIATIONS BETWEEN INTER-PARENTAL RELATIONSHIP  
QUALITY AND PATERNAL CLOSENESS AT AGE 9 ON RISKY SEXUAL  
BEHAVIOR AT AGE 15

BY LINDSEY GARTLAND

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF  
MASTER OF SCIENCE  
IN  
HUMAN DEVELOPMENT AND FAMILY SCIENCE

UNIVERSITY OF RHODE ISLAND

2023

MASTER OF SCIENCE THESIS

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2023

## ABSTRACT

Risky sexual behavior in adolescence can lead to short-term and long-term consequences such as unwanted pregnancy, sexually transmitted diseases (STI's), and increased number of sexual partners (Simons et al., 2015). In this paper, risky sexual behavior is being defined as having an early sexual debut; having sex by or at age 15. Having sex before or at age 15 poses threats to adolescent's well-being because of the increased likelihood of previously stated consequences (Magnusson, 2019). The relationship between inter-parental relationship quality, paternal closeness, and some adolescent outcomes such as drug use, alcohol use, and mental health has been previously observed (Harold et al., 2018; McLaughlin & Kaplan, 2007). Less is known about the relationship between positive inter-parental relationship quality factors, paternal closeness, and risky sexual behavior.

The current study examines the potential significance of positive inter-parental relationship qualities such as trust, communication, and perception of relationship as well as how close the child feels to their dad at age 9 on risky sexual behavior at age 15. The current study used the Fragile Families and Child Wellbeing Study (FFWS) for data analyses. This study followed children born between 1998 and 2000; baseline data, and child years 9 and 15 were used in this study. Originally, this study was conducted to measure the parenting qualities and childhood outcomes of low income, un-married mothers. Births to unmarried mothers were oversampled at a ratio of 3:1.

To examine inter-parental relationship quality, mean scores of inter-parental relationship quality scales were compared by whether or not the

adolescent had sex. An initial *t*-test revealed that mother's perception of relationship was significantly associated with risky sexual behaviors ( $p = .003$ ), as was father's perception of relationship ( $p < .001$ ). A second *t*-test revealed that there was no significant relationship between paternal closeness and risky sexual behaviors ( $p = .241$ ). To explore the associations between inter-parental relationships, paternal closeness, and risky sexual behavior, a logistical regression was conducted with demographic covariates entered to adjust for predictors of risky sexual behavior. Regression results revealed no significant associations of inter-parental relationship quality or paternal closeness and risky sex. It was found that race and education as demographic variables were better predictors of risky sexual behavior in adolescents than any of the independent variables.

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## TABLE OF CONTENTS

ABSTRACT.....	ii
ACKNOWLEDGEMENT.....	iv
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	v
CHAPTER 1.....	1
INTRODUCTION.....	1
CHAPTER 2.....	3
REVIEW OF LITERATURE.....	3
CHAPTER 3.....	14
METHODOLOGY.....	14
CHAPTER 4.....	21
FINDINGS.....	21
CHAPTER 5.....	28
DISCUSSION.....	28
BIBLIOGRAPHY.....	37



## LIST OF TABLES

TABLE	PAGE
Table 1: Demographic Characteristics by Sample Type	16
Table 2: Basic Descriptive Statistics of Independent and Dependent Variables	21
Table 3: Demographic Variables by Risky Teen Sexual Behavior	22
Table 4: Bivariate Correlation between Paternal Closeness, Father's Perception of Relationship, and Mother's Perception of Relationship	24
Table 5: Relationships between Risky Sexual Behavior, Inter-parental Relationship Quality, and Paternal Closeness	24
Table 6: Logistic Regression	26

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## CHAPTER 1

### INTRODUCTION

Risky sexual behavior in adolescence can lead to short-term and long-term consequences such as unwanted pregnancy, sexually transmitted diseases (STI's), increased number of sexual partners, and poor mental health (Simons et al., 2015). In this paper, risky sexual behavior is being defined as having an early sexual debut; having sex by or at age 15. Having sex before or at age 15 poses threats to adolescent's well-being because of the increased likelihood of previously stated consequences (Magnusson, 2019). The relationship between inter-parental relationship, paternal closeness, and adolescent outcomes regarding mental health and emotional health has been previously observed. Two studies found that higher levels of inter-parental conflict had a positive relationship with their adolescent's likelihood to have increased risk of suicide behavioral behavior and poor mental health (Olatunji & Idemudia, 2021; Fortune, Cottrell, & Fife, 2016). One study also found poor inter-parental relationship quality to be an enormous threat to a child's emotional security and found that inter-parental relationship quality negatively correlated with the child's emotional security (Adeyemi, 2016).

Parent-child relationship has been known to have strong associations with adolescent outcomes, and one study found that that parent-child relationship was the number one factor in predicting poor emotional security in children (Adeyemi, 2016). More recent research has focused on the role of the father and father-child closeness, rather than mother-child relationship. This is important because some recent research has found that mother-child and father-child relationship may have associations with separate childhood outcomes (Adamsons & Russel, 2023). In the same study, higher father-child

closeness was directly associated with lower substance abuse among adolescents (Adamsons & Russel, 2023).

These previous findings provide evidence as to why inter-parental relationship quality and paternal closeness are essential when examining adolescent outcomes. However, less is known about the relationship between inter-parental relationship quality, paternal closeness, and adolescent risky sexual behavior. Another gap in research is exploration of positive qualities of an inter-parental relationship quality during early childhood and risky sexual behavior in adolescence, as current studies tend to focus on the negative aspects. Though the role of the father is showing up in more research as of late, paternal closeness remains pertinent to study in regards to risky sexual behavior due to the research previewed above between paternal-closeness and parent-child relationship on alternative outcomes. This study intends to use Emotional Security Theory (Cummings & Miller-Graff, 2015) and Attachment Theory (Bretherton, 1992) to explain a possible connection between positive inter-parental relationship traits, paternal closeness, and risky sexual behavior in adolescents.

This thesis uses the Fragile Families and Wellbeing Study produced by Princeton and Columbia to examine a sample of adolescents from low-income families and whether or not they had sex by or before age 15, controlling for mother's income, mother and father race, education and age, and mother's marital status to the child's father. To be analyzed are the relationships between positive aspects of inter-parental relationship and level of paternal closeness at age 9 on whether or not the child had sex by or at the age of 15.

## CHAPTER 2

### REVIEW OF LITERATURE

#### *Effects of adolescent risky sexual behavior*

Having sex on or before the age of 15 increases the likelihood for unwanted pregnancy, diagnosis of STI's, increased number of partners, and increased mental health issues (Magnusson, 2019). Due to the seriousness of these issues, the Center for Disease Control (CDC) puts yearly statistics on their website to display the prevalence of these behaviors. The CDC found that 9% of high school students (ages 14-19) have had intercourse with 4 or more people; this could be considered risky because of the increased risk of sexually transmitted disease and unplanned pregnancy (CDC, 2021). In addition, 21% of new human immunodeficiency virus (HIV) infections reported in 2016 were in the 13-24 year-old age range (Witwer et al., 2018). This is concerning considering STI's and HIV alike can be asymptomatic, and adolescents might not know that they are passing these diseases along to their sexual partners, or that they themselves have contracted the disease. Also of concern is the potential for the disease to go untreated. Unbeknownst to many adolescents, sexually transmitted infections can have more serious implications such as incurability, sterility, and death (CDC, 2021).

Early sexual debut contributes to certain health outcomes such as increased STI's, poorer mental health, gynecological issues, and multiple sex partners (Else-Quest et al., 2005; Kalina et al., 2013). People who are less than 15 years old at first sexual intercourse are also less likely to use contraceptives and therefore have a higher risk of having unintended pregnancy and contracting STI's (Magnusson, 2019). Though teenage pregnancy is less common than it was 20 years ago, it still remains important to study due

to the seriousness of the short-term and long-term repercussions of an unplanned pregnancy (Ahern & Bramlette, 2014). Immediate consequences include, but are not limited to, serious physical medical issues with the mother and fetus and potential exclusion from friend groups and school activities, which are important aspects of an adolescent's life (Ahern & Bramlette, 2014). The average adolescent is not equipped with the knowledge to take care of a pregnant body, and therefore, physical health concerns and overall serious health issues are increased in teen pregnancies (Ahern & Bramlette, 2014). Long term, teen pregnancy greatly lessens chances of graduating high school and attending college, and teen mothers are more likely to live in poverty and earn less money (Diaz & Feil, 2016).

Due to changing hormones and life circumstances, adolescents are already at a higher risk for mental health and substance abuse issues. In addition to that, unwanted teen pregnancy, termination, and fetal loss have been shown to be significant predictors for poor mental health in adolescents (Ahern & Bramlette, 2014). Adolescent mothers are at a higher risk for anxiety disorders, panic disorders, suicidal ideation, and substance abuse (Ahern & Bramlette, 2014). A 2014 study done to evaluate the long term effects of early sexual debut studied many adolescent outcomes and had an average sexual debut age of age 15. This study found that early sexual debut had increased instances of trying drugs such as heroin, cocaine, and ecstasy, alcohol, as well as increased risk for having more sexual partners and likelihood to experience sexual abuse (Kastbom et al., 2014).

*Inter-parental relationship quality and risky sexual behavior*

There are many factors that contribute to the use of healthy sex practices in adulthood, and some of these factors are related to parenting practices and inter-familial relationships during childhood. The quality of the relationship between two parents has been defined in several ways in previous research. Commonly, divorce and physical violence between couples has been used to define inter-parental relationship quality (Harold et al., 2018). This research has found that divorce and witnessing physical conflict has been linked to risky sexual behavior in adolescents as well as increased likelihood of sex (Orgilés, 2015; Onofrio & Emery, 2019; Rivera et al., 2015). In one study, adolescents who came from a divorced family were much more likely to have intercourse, anal sex, oral sex, and have multiple partners than those who had parents who were married (Orgilés, 2015). In another study, researchers found that exposure to inter-parental violence had a positive association with sexual risk behaviors such as not using a condom and engaging in sex while under the influence of drugs or alcohol (Rivera et al., 2015). These studies listed above have defined inter-parental relationship quality as the presence of negative relationship traits such as violence and divorce and these relationship traits have been associated with less favorable sex behaviors in adolescents.

Recent research has also found that non-physical conflict within the home can also contribute to children's poor mental health and other outcomes. A couple that is engaged in a more distressed relationship can often relay that distress into interactions with their children and become less sensitive and responsive to their children's needs, which can lead to increased problem behaviors later in life (Harold et al., 2017). Orgilés

et al., 2015 did a study to measure the perception of parent's relationship on the likelihood that the adolescent will engage in oral, anal, or vaginal sex. These adolescents were asked "how do you feel the relationship is between your parents?" and answered on a 5 point Likert scale. They found that when adolescents perceive/rate the quality of their parent's relationship as higher, they are less likely to have any type of sex (Orgilés et al., 2015). This same study found that perceived poor quality of inter-parental relationships has a greater negative impact on adolescents than does the type of family structure (Orgilés et al, 2015). In addition to this, verbal aggression in an inter-parental relationship has also been linked to increased likelihood for adolescents to engage in vaginal intercourse in high school (Voisin et al., 2013). These studies above measure inter-parental relationship negatively by examining divorce, physical and verbal violence. The current study intends to add to this research by examining associations between positive aspects of relationship status such as trust, communication, and perception of inter-parental relationship on adolescent risky sexual behavior.

To bring new light and information about positive aspects of relationships and how it is associated with early sexual debut, this study will include three indicators of quality of inter-parental relationship: trust, communication, and father/mother perception of relationship. In 2016, the Early Intervention Foundation found that the way in which parents communicate and relate to each other had a large impact on their ability to employ positive parenting practices, which in turn has short-term and long-term effects on childhood and adolescent outcomes (Early Intervention Foundation, 2016). The foundation found that parents who have frequent conflict that is poorly resolved due to lack of communication put their children at higher risk for unwanted behaviors in all

stages of childhood, including risky sexual behavior in adolescence (Early Intervention Foundation, 2016). Effective communication can be measured partly in self-disclosure (Meek et al., 1998), which could potentially include each parent's willingness to admit a problem or issue with their child to the other parent. Trust is another aspect of relationships that often goes understudied, though it is considered one of the most important foundational features of a relationship (Campbell & Stanton, 2019). This study intends to add to the research by diving into these positive relationship traits to measure inter-parental relationship quality.

#### *Inter-parental relationship quality and other child and adolescent outcomes*

Starting from early childhood, there are essential skills parents must have to promote connection and communication with their child. Parental responsiveness, warmth, and support are three important skills that are critical to healthy emotional growth in a child (Waldron et al., 1995). Unfortunately, when inter-parental relationship quality is low, these skills are harder to achieve and childhood outcomes tend to suffer due to lack of sensitivity and consistency in parenting (Lux & Walper, 2019). There are different family structures that could potentially affect inter-parental relationship and childhood outcomes. Orgilés argued that the safest family structure regarding risky sexual behavior among adolescents is one where both biological parents are involved (Orgilés, 2015).

There has been significant research on early childhood and adolescent outcomes and family structure and instability, but less is known about how relationships within the family affect a child or adolescent (Goldberg & Carlson, 2014; Bzostek & Berger, 2017). Children born to married parents have been shown to have less behaviors such as being



withdrawn, aggressive, or anxious between the ages of 3 and 9. Likewise, children born to parents who are not cohabitating versus cohabitating are also more at risk for these behaviors (Bzostek & Berger, 2017). Behavior issues in early childhood are a common complaint of parents and teachers alike, but parents who view their relationship with their spouse as supportive often report that their children have less of those complaints (Goldberg & Carleson, 2014). In a 2014 study, parents who rated their relationship with their significant other as good saw less problem behavior from their 5–9 year-old (Goldberg & Carlson, 2014). As we know, children learn through experience and may learn some patterns of behavior by watching how their parents interact (Bandura, 1978). Previous research has shown that family-based experiences often lead to progression of these foundational skills for children. These results suggest that investigation into inter-parental relationship quality during early years is necessary to understand risky sexual behaviors in adolescence.

*Paternal closeness and parent-child relationship on risky sexual behavior*

In past research, researchers found that the positive parent-child relationship is an important factor in preventing unprotected intercourse, intercourse initiation, and diagnosis of STI's (Deptula & Schoeny, 2010; Langley, 2016). Other older studies have focused on the relationship between mother and child, or parent and child with no specified parent (Catalano et al., 2002). Another older study found that a closer relationship between mother and child was significantly associated with later first sex in 8th and 9th graders (Sieving et al, 2000). Despite these findings, some other research shows evidence that the parent-child relationship does not support better sexual outcomes (Lohman & Billings, 2008).

The researched mentioned above is somewhat inconsistent. More recent research has focused more on paternal involvement and closeness in regards to adolescent outcomes, instead of just mother-child relationship outcomes. The presence of a father in a child's life has been connected to other positive childhood outcomes such as an increase in child self-esteem and cognitive functioning (Langley, 2016; Cano et al., 2017). In addition, Grossman et al. (2019) found that greater paternal closeness was associated with less vaginal intercourse before age 15, but this was only when maternal closeness was controlled for. Other studies showed that increased paternal involvement predicts likelihood of early sexual debut for girls (Raeburn, 2014; Regnerus & Luchies, 2006). These findings warrant more research on father-child relationship in regards to risky sexual behaviors as our society evolves and changes and family structures are less likely to be two parent households. Also, these articles mentioned above measured and analyzed paternal relationship and closeness and risky sexual behavior at the same time. The current study aims to add another aspect to the research by looking at paternal closeness at a younger age and how that associates with risky sexual behavior later on in life rather than immediately.

*Context factors related to sexual behavior: Income, race, marital status, and parent age*

Race has been known to be a significant predictor of risky sex in adolescents. The current research says that African American adolescents are more likely than their White and Hispanic counterparts to have ever had sex and to have a greater number of sexual partners, and are less likely to use condoms (CNDC, 2018). Race also comes into play because the rates in which African American and white fathers are incarcerated are not comparable. By the time a child is 14 years old, 1 in 4 African American children have

fathers that are incarcerated, when compared to 1 in 25 white fathers (Wildman, 2010). This may greatly impact the amount a child's father can be involved in the child's life and how close the child feels they are to their dad. Another risk factor previously researched regarding adolescent sexual behavior is their parents' marital status. In this study, many of the mothers are not married, let alone married to their child's father, so this is an important aspect to control for when looking at risky sexual behaviors. As mentioned previously, family structure has been found to have associations with risky sexual health outcomes, and children who live with both biological parents are less likely to engage in sex earlier than those who live with a single or step parent (Pearson et al., 2006).

Economic instability has long been a stressor for marriages and romantic relationships alike, and this stressor has been shown to be debilitating to these relationships. Financial hardship creates tension and frustration between partners (Hardie & Lucas, 2010) and is associated with higher rates of domestic violence (Acquah et al., 2017). In 2007, researchers determined that income was one of the strongest predictors of risky sexual behavior in adolescents (McLaughlin & Kalpin, 2007). Considering the sample of participants chosen from this study are mostly low income, examining risky sexual behaviors becomes of high importance.

### *Theoretical Consideration*

Emotional security theory focuses on a model that connects inter-parental conflict and child psychopathy (Cummings & Miller-Graff, 2015). This theory focuses on the child's feelings of security within the family system and how it is associated with their adjustment. A child's emotional security is largely dependent on the frequency and

severity of parents' hostility, violence, and unresolved issues. The more prominent these things are in an inter-parental relationship, the more toxic a child's environment becomes (Cummings & Miller-Graff, 2015). Cummings highlights how a child's cumulative experiences with coping and reacting to an inter-parental relationship over time facilitates psychological adjustment (Cummings & Miller-Graff, 2015). In 2009, McCoy, Cummings, & Davies did a study on constructive and destructive marital conflict on children's prosocial adjustment using Emotional Security Theory as a base for why they chose to use emotional security as a variable. This study found that destructive marital conflict had an impact on child maladjustment, with child emotional security as an intervening variable (McCoy et al., 2009). They found that the better emotional security in the child had a positive correlation with prosocial behavior (McCoy et al., 2009).

Emotional Security Theory has been used over time by studies regarding childhood outcomes and is consistent with the findings of attachment theory but adds in the complexity of inter-parental relationship, rather than just parent-child relationship. Attachment Theory focuses on the parent-child relationship and the child's ability to connect with others and the world based on early experiences with their parents (Bretherton, 1992). This theory focused on four types of attachment; secure, anxious-ambivalent, disorganized and avoidant. These attachment styles are largely dependent on the child's ability to rely on their parent to attend to their needs in an appropriate and timely manner (Bretherton, 1992). A secure attachment ensures that a child feels comfortable embarking into unknown situations in order to grow and learn in all areas of development. When a child has an anxious attachment, they are less sure of exploring the world around them and taking risks, because they are not sure that they have a safe

“base” to go back to. This can impede learning trajectories and other outcomes.

Attachment theory is being used in this study to look at father-child closeness because of the possibility that type of attachment can have an association with risky sexual behavior.

The inter-parental relationship becomes important when looking at child outcomes because of the changes it can make to the type of parenting that is accomplished during childhood. Marital discord can often cause decrease in parent sensitivity, cause changes and inconsistencies on how they discipline their children, and alter the emotional availability of each parent. This puts a child at a higher risk for insecure attachment with their parents and therefore at higher risk for problem behaviors later in life (Lux & Walper, 2019). This paper intends to use the flip side of Emotional Security Theory as a framework to explain how the presences of positive rather than negative inter-parental relationship qualities such as trust and communication can increase these positive parenting practices and therefore show more favorable child outcomes later in life.

Current research is limited by its focus on more negative aspects of an inter-parental relationship such as divorce, physical violence, or non-physical conflict, and this study intends to add information about the relationship between positive relationship factors such as trust, communication, and perception of relationship with risky sexual behavior in adolescents. This study will measure paternal closeness in childhood and risky sexual behavior in early adolescence which is not commonly found in research listed previously. A limitation from current research is the large prevalence of mother’s report and lack of father’s. This study will use both the mother and father report of the same variables. It is hypothesized that as the parents rate their relationship as higher

quality when the child is 9, the less likely the child will report risky sexual behavior at age 15. It is also hypothesized that as children rate their relationship with the father as more close, they will engage in less risky sexual behavior. A third aspect of this paper will be exploratory and will examine the relative strengths of the independent variables.

## CHAPTER 3

### METHODOLOGY

#### **Procedures and Sampling**

The current study will use the Fragile Families and Child Wellbeing Study (FFWS) for data analyses. This study followed children born between 1998 and 2000, including about 5000 families. Mother and father interviews were collected when the babies were born, and then again at ages 1, 3, 5, and 9 years-old. Additionally, a 6th wave of data was collected when the children were 15 years-old, and a 7th at age 22 was started in 2020. Year 9 was the last year that mother and father surveys were collected. Births to unmarried mothers were oversampled at a ratio of 3:1. Originally, the data were collected to assess some basic variables such as competence of unmarried parents, the nature of relationships between unmarried parents, extensive childhood outcomes, and the effect of environment and policy on these families. The initial interview was done with the mother at birth, and with the paternal at birth or shortly thereafter via telephone.

For this study, the 5th wave, year 9, was used to measure paternal closeness and inter-parental relationship quality. The 6th wave, year 15, was used to measure risky sexual behaviors. Variables used for demographics such as mother and father age, race, and education were taken from baseline data. Mother's marital status, and mother's income were taken from year 9 data. The Fragile Families Wellbeing study was a collaboration between Princeton University's Center for Research on Child Wellbeing and the Columbia Population Research Center. The research team is made up of 25 researchers from Columbia University and Princeton University. The study components and data collection methods were approved by The Institutional Review Board (IRB) at

Columbia and Princeton University. These data were made available to me after requesting permission via email and application from the FFWS team.

The present study included only the children who participated in the year 15 survey. This narrowed the sample down to 3444 participants. The sample was narrowed down further by removing the participants (mother, father, and child) who did not have an answer for one or more of the independent variables, which left a sample of 1699 participants. All 1699 (49.3%) participants have answers from the mother, father, and child. Excluded were mothers who did not answer relationship quality questions ( $n=850$ ), fathers who did not answer relationship quality questions ( $n=1236$ ), and adolescents who did not answer question about paternal closeness ( $n=1053$ ).

**Table 1** presents baselines differences between those adolescents and their families who were included in the study because they have all data for the independent variables ( $n=1699$ ), and those who are excluded from the study ( $n=1745$ ). All of the demographic variables were significant. Higher percentages of both mothers and fathers were white in the study group, and there were more black mothers in the excluded group. Fathers were almost twice as likely to be black as compared to white or the other category in the total sample, but were shown to have a slightly higher percentage in the study group than in the excluded group. Father's education is significant in all four groups and fathers are more educated in the study group. More mothers have college experience in the study group as compared to the excluded group. In both groups, mothers were not likely to be married to the child's father at age 9. However, the gap is notable when comparing between the study and excluded groups, as 42 percent of the study group answered "yes," and only 11 percent of the excluded group answered "yes"



to being married to the child’s father at age 9. Both mother and father were slightly older in the studied group. Mothers earned more money in this group compared to the excluded group. Based on these findings, the excluded group appear to be higher risk than the study group.

**Table 1: Demographic Characteristics by Sample Type (n=3,444)**

<b>Demographic Attribute</b>	<i>ALL</i>	<i>Missing</i>	<i>Total</i>
	<i>Independent Variable data</i> (n=1699) % (n)	<i>Independent Variable data</i> (n=1745) % (n)	(n= 3444) % (n)
<b><i>Father’s Race***</i></b>			
White	28.4 (482) <sup>a</sup>	18.1 (316) <sup>b</sup>	23.2 (798)
Black	44.3 (752) <sup>a</sup>	39.2 (684) <sup>b</sup>	41.7 (1436)
Asian	2.2 (37) <sup>a</sup>	1.4 (24) <sup>a</sup>	1.8 (61)
American Indian	2.0 (34) <sup>a</sup>	3.4 (59) <sup>b</sup>	2.7 (93)
Other	10.6 (180) <sup>a</sup>	9.2 (161) <sup>a</sup>	9.9 (341)
Missing	12.6 (214) <sup>a</sup>	28.7 (502) <sup>b</sup>	20.44 (715)
<b><i>Mother’s Race***</i></b>			
White	33.0 (560) <sup>a</sup>	27.1 (473) <sup>b</sup>	30.0 (1033)
Black	48.0 (816) <sup>a</sup>	54.3 (948) <sup>b</sup>	51.2 (1764)
Asian	2.6 (45) <sup>a</sup>	2.0 (35) <sup>a</sup>	2.3 (80)
American Indian	2.0 (34) <sup>a</sup>	5.9 (103) <sup>b</sup>	4.0 (137)
Other	12.5 (212) <sup>a</sup>	5.1 (158) <sup>b</sup>	10.8 (370)
Missing	1.9 (32) <sup>a</sup>	1.6 (28) <sup>a</sup>	1.8 (60)
<b><i>Mother’s Education***</i></b>			
Less than High School	18.8 (320) <sup>a</sup>	19.3 (336) <sup>a</sup>	19.0 (656)
High School or Equivalent	21.1 (359) <sup>a</sup>	18.8 (328) <sup>a</sup>	19.9 (687)
Some College/Tech	41.3 (701) <sup>a</sup>	34.6 (604) <sup>b</sup>	37.8 (1305)
College or Grad	18.7 (318) <sup>a</sup>	9.3 (163) <sup>b</sup>	14.0 (481)

Missing	.1 (1) <sup>a</sup>	18.0 (314) <sup>a</sup>	9.1 (315)
<b><i>Father's Education</i></b>			
Less than High School	22.5 (383) <sup>a</sup>	8.0 (129) <sup>b</sup>	15.2 (522)
High School or Equivalent	26.3 (447) <sup>a</sup>	9.7 (170) <sup>b</sup>	17.9 (617)
Some College/tech	35.3 (599) <sup>a</sup>	12.5 (218) <sup>b</sup>	23.7 (817)
College or Grad	15.3 (260) <sup>a</sup>	4.6 (81) <sup>b</sup>	9.9 (341)
Missing	.6 (10)	.3 (5)	.4 (15)
<b><i>Mother Married To Child's Mother</i></b>			
No	54.7 (975) <sup>a</sup>	69.9 (1219) <sup>b</sup>	63.7 (2194)
Yes	42.4 (721) <sup>a</sup>	11.6 (202) <sup>b</sup>	26.8 (923)
Missing	.2 (3) <sup>a</sup>	18.6 (324) <sup>a</sup>	9.5 (327)
<b><i>Mother's Income (SD)***</i></b>			
	54,470 (56,452)	41,567 (50,413)	48,683 (54,198)
<b><i>Mother's age*** (SD)</i></b>			
	25.7 (6.10)	24.4 (5.80)	25.2 (5.9)
<b><i>Father's age*** (SD)</i></b>			
	28.2 (7.26)	27.2 (7.05)	27.7 (7.1)

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\*\*\* p<.001, \*\* p< .01, \* p<.05

## Measures

### *Risky sexual behavior*

For this study, risky sexual behavior served as the dependent variable and consisted of whether the child had engaged in sex before or at age 15. Early sexual debut is risky because of increased risk of unwanted pregnancy, STI's, and increased number of sexual partners (Simons et al., 2015). At age 15, the children in the study were asked questions about their sexual health. Two questions regarding sexual risk behaviors were combined into a new variable to measure sexual risk. The adolescents were asked (1)

Have you had sex with your current partner? (2) Have you ever had sexual intercourse with anyone, that is, made love, had sex, or gone all the way? Answers to both questions were recorded as Yes (1), No (0). If the child answered the first question “yes,” the next question was skipped by the interviewer. These questions were combined into one variable and made into a risk index. Answers recorded as “Yes” received 1 point, and answers recorded as “No” received 0 points. Adolescents who scored 1 were considered risky because they have engaged in sex by age 15; those who receive a score of 0 were considered not risky because they have not had sex.

#### *Inter-parental relationship quality*

Inter-parental relationship quality is considered an independent variable for this study. To measure inter-parental relationship quality, several survey questions were chosen from the questions asked of both mother and father during year 9. A variable combining three questions about their relationship was created. Mother and father responses for these questions were included and made into two separate scales (one for each parent). First, the parents were asked “In general, would you say that your relationship with father/mother is: (1) excellent, (2) very good, (3) good, (4) fair, (5) poor?” To measure communication, parents were asked how often do “you and {FATHER/MOTHER} talk about problems that come up with raising {CHILD}?” To measure trust, the parents were asked how often “you can trust {FATHER/MOTHER} to take good care of {CHILD}” to the opposite parent. Answers to both trust and communication were (1) always true, (2) sometimes true, (3) rarely true, (4) and never true. For both the mother and the father, these three items were added together into a scale. In order to combine these three variables which have different coding into one

scale, each variable's response scale was re-coded into 3 categories. Perception of relationship's original coding of excellent/very high was combined into a category 1 = high; good/fair was combined into a category 2 = moderate; and poor 3 = low. For both communication and trust, original coding of always true was coded as (1) high, sometimes true was coded as (2) moderate, and rarely true/never true was combined and re-coded as (3) poor. For each parent, the three re-coded variables were added into a scale that has a response range between 3 and 9. Lower scores reflect a higher quality relationship, and higher scores indicate a lower quality relationship.

#### *Paternal closeness*

Paternal closeness is considered an independent variable for this study. To measure paternal closeness, this study used the child's perception of how close he/she feels to their dad. In year 9, the children were asked "How close do you feel to your dad?" The answers are: (1) Extremely close, (2) Quite close, (3) Fairly close, (4) Not very close. Original coding for this variable was used.

#### *Contextual factors*

Descriptive variables for mother's income and if the mother was married to the child's father came from the Fragile Families year 9 sample. Mother and father age, race, and education were taken from the baseline data. These variables were tested as potential covariates.

#### **Data Analysis**

Descriptive analyses were conducted in order to assess the age of the mother and father, mother and father education level, mother and father race, mother's income and mother's marital status to the child's father, and to identify any missing items that may

prevent use of a variable. This was also used to identify mistakes in coding. A *t*-test was conducted in order to determine a relationship between the mother's income and age with risky sexual behavior. A chi-square analysis was conducted to see if risky sexual behavior varies by demographic variables such as mother and father race, mother and father education level, and if the mother is married to the child's father. To determine if inter-parental relationship quality at age 9 is related to the level of the adolescent's risky sexual behavior at age 15, mean scores of relationship quality scale were compared by level of risky sexual behaviors using another *t*-test. To determine if paternal closeness is a predictor of risky sex, one more *t*-test was run to compare means of paternal closeness with risky sexual behavior. To explore the associations between relationships, paternal closeness, and risky sexual behavior, a logistical regression was conducted with demographic covariates entered to adjust for predictors of risky sexual behavior.

## CHAPTER 4

### FINDINGS

**Table 2** includes basic descriptive statistics of the independent variables. Risky teen sexual behavior was a dichotomous variable so it was not included in this table; 15.8 percent ( $n=270$ ) of the adolescents reported engaging in sexual activity before age 15, and 84.2 percent ( $n=1429$ ) reported that they did not. The minimum value of 3 represents a better inter-parental relationship and the maximum value of 9 represents a poorer inter-parental relationship. The mean value for how mothers rated their relationships with the fathers was higher than the mean value for how the fathers rated their relationships with the mothers, showing that fathers felt they had a better relationship with the mothers than mothers did with the fathers. For paternal closeness, a value of 1 represents the child rated their relationship with the paternal as extremely close, and a value of 4 represents that the child rated their relationship with their dad as not close. This table shows that the children mostly rated their relationship with their father as close at age 9.

**Table 2 - Basic Descriptive Statistics of Independent and Dependent Variables**

	<b>N</b>	<b>Range</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
<i>Mother's perception</i>	1699	6.00	3.0	9.0	4.35	1.65
<i>Father's perception</i>	1699	6.00	3.0	9.0	4.06	1.43
<i>Paternal Closeness</i>	1699	4.00	1.0	4.0	1.65	.96

**Table 3** presents baseline differences in demographic variables based on prevalence of risky teen sexual behavior. Mother's race ( $p < .001$ ), father's race ( $p < .001$ ),

mother's education ( $p < .001$ ), father's education ( $p < .001$ ), mother married to child's father ( $p < .001$ ), mother's age ( $p < .001$ ), and mother's income ( $p < .001$ ) were significant at the .001 level. Father's age ( $p < .022$ ) was significant at the .05 level. A significantly higher percentage of black adolescents had sex by age 15 than did white adolescents. Adolescent's mother's income was, on average, higher in the group that did not have sex. Adolescents with older mothers engaged in less risky sexual behavior before age 15 as compared to those with younger mothers. This is the same for adolescents with older fathers. Adolescents whose mother fell into the "Less than High School category" were more likely to engage in risky sexual behavior, and those whose mother fell into the "College or Grad" category were significantly less likely. In the risky sexual behavior category, the adolescent's mother was much less likely to be married to the child's father than those in the no risky sexual behavior category.

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**Table 3- Demographic Variables by Teen Sexual Behavior**

<b>Demographic Attribute</b>	<b>No Risky Sexual Behavior (n=1429) %(n)</b>	<b>Risky Sexual Behavior (n=270) %(n)</b>
<b><i>Father's Race***</i></b>		
White	35.2 (444) <sup>a</sup>	16.9 (38) <sup>b</sup>
Black	47.1 (593) <sup>a</sup>	70.7 (159) <sup>b</sup>
Asian	2.7 (34) <sup>a</sup>	1.3 (3) <sup>a</sup>
American Indian	2.4 (30) <sup>a</sup>	1.8 (4) <sup>a</sup>
Other	12.6 (159) <sup>a</sup>	9.3 (21) <sup>a</sup>
<b><i>Mother's Race***</i></b>		
White	35.5 (497) <sup>a</sup>	23.5 (63) <sup>b</sup>
Black	45.7 (640) <sup>a</sup>	65.7 (176) <sup>b</sup>

Asian	3.1 (44) <sup>a</sup>	.4 (1) <sup>b</sup>
American Indian	2.1 (29) <sup>a</sup>	1.9 (5) <sup>a</sup>
Other	13.5 (189) <sup>a</sup>	8.6 (23) <sup>b</sup>
<b><i>Mother's Education</i>***</b>		
Less than High school	17.6 (251) <sup>a</sup>	25.7 (69) <sup>b</sup>
High School or Equivalent	20.9 (298) <sup>a</sup>	22.7 (61) <sup>a</sup>
Some College	40.04 (577) <sup>a</sup>	46.1 (124) <sup>a</sup>
College or Grad	21.2 (303) <sup>a</sup>	5.6 (15) <sup>b</sup>
<b><i>Father's Education</i>***</b>		
Less than High School	21.9 (313) <sup>a</sup>	25.9 (70) <sup>a</sup>
High School or Equivalent	24.4 (348) <sup>a</sup>	36.7 (99) <sup>b</sup>
Some College/tech	36.2 (518) <sup>a</sup>	30.0 (81) <sup>b</sup>
College or Grad	17.1 (244) <sup>a</sup>	5.9 (16) <sup>b</sup>
Missing	.4 (6) <sup>a</sup>	1.5 (4) <sup>b</sup>
<b><i>Mother Married To Child's Father</i>***</b>		
Yes	45.7 (652)	25.7 (69)
<b><i>Mother's age (SD)</i>***</b>	26 (6.1)	24.5 (5.9)
<b><i>Father's age (SD)</i>*</b>	28.3 (7.2)	27.1 (7.1)
<b><i>Mother's</i></b>		
<b><i>Income m (SD)</i>***</b>	57631 (59162)	37618 (34447)

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\*\*\* p<.001, \*\* p< .01, \* p<.05

Correlations between paternal closeness, father's perception of relationship, and mother's perception of relationship are presented in **Table 4**. No significant relationship was found between mother's perception of relationship and paternal closeness ( $p=.687$ ). However, paternal closeness and father's perception of relationships are negatively correlated ( $p=.022$ ). As the father's perception of the relationship gets better (scores lower), paternal closeness gets better. Another significant correlation that was found was a positive correlation between mother's and father's perception of their relationship



( $p < .001$ ). As the mother's perception of the relationship gets worse (scores higher), the father's perception gets worse (scores higher). Overall, none of the independent variables were correlated past .80 and therefore were considered independent from each other.

**Table 4.** *Bivariate Correlation between Paternal Closeness, Father's Perception of Relationship, and Mother's Perception of Relationship*

	Paternal Closeness	Father's Perception
Father's Perception	-.051*	
Mother's Perception	.008	.511**

\*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$

**Table 5** displays the relationships between the independent and dependent variables. Mother's perception of relationship ( $p = .003$ ) and father's perception of relationship ( $p < .001$ ) were both significantly associated with their adolescent's risky sexual behavior. Both mothers and fathers rated their relationship as better in the no risky sexual behavior group as compared to the risky sexual behavior group. Though children rated their closeness with their dad as closer in the no risky sexual behavior group, paternal closeness was not found to be significantly associated with risky sexual behavior ( $p = .241$ ).

**Table 5 - Relationships between Risky Sexual Behavior, Inter-Parental Relationship Quality, and Paternal Closeness**

No Risky Sexual Behavior ( $n=1429$ ) %(n)		Risky Sexual Behavior ( $n=270$ ) %(n)	
Mean	SD	Mean	SD

<i>Mother's Perception Of Relationship**</i>	4.30	1.64	4.62	1.67
<i>Father's Perception Of Relationship***</i>	4.01	1.40	4.35	1.54
<i>Paternal Closeness</i>	1.56	.89	1.64	.98

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**Table 6** shows results of a logistic regression predicting risky sexual behavior. None of the independent variables came out to be significant predictors of risky sexual behaviors. Overall, father's race was a significant factor associated with risky sexual behavior. Compared to adolescents with white fathers, adolescents with fathers who were either black ( $p = .013$ ) or considered themselves "other" ( $p = .003$ ) race were significantly associated with risky sexual behaviors. Adolescents with black fathers were 2.6 times more likely to engage in risky sexual behavior than adolescents with white fathers. Likewise, mother's race was significantly associated with risky sexual behaviors, as was mother's education status. Adolescents whose mother's reported their race as "other" were the least likely to have had risky sexual behavior. Adolescents whose mothers fell into the "Less than High School," "High School or Equivalent," and "Some College" category were approximately 4 times more likely to engage in risky sexual behavior than those whose mothers fell into the "College or Grad" category. The Cox and Snell test done on the regression revealed that for demographics, the R squared value was .078. Once the inter-parental relationship quality (.079) and paternal closeness (.081) was entered, the values did not rise a substantial amount. This showed that none of the predictors analyzed in this study were great predictors of risky sexual behavior.

**Table 6. Logistic Regression**

<b>Variable</b>	<b>Odds Ratio (CI)</b>	<b>P Value</b>
<b><i>Father's Race (vs. White)*</i></b>		.026
Black*	2.631 (1.225-5.649)	.013
Asian	4.119 (.648-26.175)	.133
American Indian	1.373 (.365-5.158)	.639
Other**	3.538 (1.550-8.075)	.003
<b><i>Mother's Race (vs. White)*</i></b>		.031
Black	.798 (.398-1.580)	.793
Asian	.216 (.021-2.191)	.195
American Indian	.681 (.176-2.641)	.579
Other**	.238 (.096-.587)	.002
<b><i>Mother's Education (vs. College or Grad)*</i></b>		.010
Less than High School**	4.060 (1.688-9.767)	.002
High School or Equivalent**	3.431 (1.491-7.849)	.004
Some College***	3.730 (1.716-8.110)	<.001
<b><i>Father's Education (vs. College or Grad)</i></b>		.146
Less than High School	1.114 (.517-2.399)	.783
High School or Equivalent	1.186 (.570-2.470)	.648
Some College	.734 (.357-1.508)	.400
<b><i>Mother's Income</i></b>	1.000	.736
<b><i>Mother Married to Child's</i></b>	.717 (.455-1.129)	.150
<b><i>Father</i></b>		
<b><i>Mother's Age</i></b>	.979 (.934-1.038)	.360
<b><i>Father's Age</i></b>	1.003 (.969-1.038)	.869
<b><i>Mother's Perception</i></b>	.955 (.842-1.083)	.476
<b><i>Father's Perception</i></b>	1.065 (.937-1.211)	.336
<b><i>Paternal Closeness (vs. Extremely Close)</i></b>		.472
Quite Close	.991 (.633-1.551)	.967
Fairly Close	.582 (.292-1.162)	.125
Not very close	1.068 (.548-2.079)	.848

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**\*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$**

## CHAPTER 5

### DISCUSSION

The current study explored the associations of inter-parental relationships and paternal closeness with risky adolescent sexual behavior. Specifically, this study sought to focus on parent's perception of their relationship, trust, communication, and how close the child felt to their father at age 9. It was hypothesized that as a parent rated their relationship with the other parent as better at age 9, their adolescent would be less likely to engage in risky sexual behavior at age 15. This study also hypothesized that as a child rated their relationship with their father as more close, they would also engage in less risky sexual behavior.

Study findings from a logistic regression found that neither father's nor mother's perception of their relationship (H1) nor level of paternal closeness (H2) had an association with their adolescents' risky sexual behavior. Regarding hypothesis 1, the findings that father's and mother's perception of relationship were not significantly associated with risky sexual behavior go against current research regarding risky sexual behaviors and inter-parental relationship quality (Early Intervention Foundation, 2016; Harold et al., 2017; Origles, 2015). However, these other studies used negative indicators of inter-parental relationship (physical violence, outward inter-parental conflict).

For hypothesis 1, a reason for these null results could be the way the inter-parental relationship quality was measured. The current study used different measurements of quality that may be considered less telling of how their relationship is perceived by others around them, especially the parent's children. Achqua et al reminds us that research conducted over the last 30 years has shown that children's outcomes are

more impacted by conflict that is overt and more noticeable than conflict that is less outward (Achqua et al., 2017). The current study also did not account for the child's perception of the parent's relationship, which potentially could have been measured with questions about how the child felt about their parent's relationship with each other. An early study by Grync & Fincham (1990) explores the conceptual framework of marital conflict and child outcomes. This framework relies heavily on if a child understands and remembers past conflict, as these things appear to affect a child's sensitivity to said conflict and therefore would affect their outcomes more heavily (Grync & Fincham, 1990). This study focuses on positive relationship quality traits and did not measure witnessing domestic violence or fighting. It is possible the other research that relies on physical violence or outward conflict shows more of a correlation between risky sexual behaviors in part due to this idea that the conflict is memorable and re-collectable to a child.

Hypothesis 2 was also not supported as paternal closeness did not significantly predict risky sexual behavior in the regression. My findings go against some research done by an older study that used similar measures for closeness and risky sexual behaviors. They found that a lower quality father-child relationship corresponded with higher levels of non-virgin adolescents (Regnerus, 2007). The difference could be due to the fact that this other study used a few other questions along with "how close do you feel to your dad" to measure closeness, which may give a better picture of closeness. This study also used "how much do you feel your father cares for you?" as well as had the adolescents answer questions about how many activities they did with their father in the weeks prior to the questioning. Another study that used parent report of how close they

felt they were to their child found that as paternal closeness rapidly declined, the children were more likely to engage in oral sex, but not intercourse, which findings fits more with the current study (McElwain & Bub, 2018). Potential differences in findings between this study and the current study could be that McElwain and Bub's study used a parent report for parent-child relationship and a child report was used for the current study.

An interesting finding in this study was the change in significance between when the bivariate analyses were conducted and when further investigation was conducted by entering the variables into a logistic regression. Initially, a Pearson's correlation was run to determine if there was a relationship between the independent variables. Both mother's ( $p < .003$ ) and father's ( $p < .001$ ) perception of relationship were significant regarding risky teen sexual behavior before demographic variables were accounted for. Regardless of demographic variables, paternal closeness was not significant ( $p < .241$ ). When the demographics were entered into the logistic regression, mother's and father's perception of the relationship were no longer significant. As mentioned previously, race and education were the only two significant predictors that came up regarding risky teen sexual behavior in the logistic regression. Adolescents with black fathers and fathers who reported "other" as their race were at higher risk of having risky sexual behaviors. As were adolescent's whose mothers reported having less education than college or graduate school. Interestingly, adolescents whose mother reported their race as "other" were the least likely to have had risky sex. This is interesting because it is the opposite of adolescents whose father reported their race as "other."

Much research has been done regarding economic stress and childhood outcomes. This study's results support the idea that education and race, two important factors when

looking at economic stress, might be more important than the specific positive inter-parental relationship qualities to risky sexual behavior. Social disadvantage plays a large part in risky sexual behaviors and research has shown that the more socially disadvantaged the family is, the more likely the adolescents are to have an early sexual debut (Bae et al., 2022). Black adolescents are at higher risk for having sex earlier on in life, and for contracting STI's (Biello et al., 2013). This could be because there is a higher association with being black and being socially disadvantaged versus other races (Bae et al., 2022).

Mother's education was consistently significant throughout this study, and it has been known that level of education has a direct positive relationship with household income (U.S. Bureau of Labor Statistics, 2023). When household income is higher, adolescents are more likely to have access to information regarding sexual health and contraception, which can help decrease risky sexual behaviors (Chen et al., 2012). Higher mother education may also be associated with lower rates of risky sexual behaviors because those who have higher education can generally work less hours at a higher paying job versus those who aren't educated having to work more hours at a lower paying job to make comparable amounts of money. This could leave adolescents whose mothers are less educated less monitored during the day and therefore are at more risk to engage in risky sexual behaviors. These factors may be more important to consider than inter-parental relationship quality and paternal closeness, as much of the sample have less education and are almost twice as likely to be black.

This study used Emotional Security Theory and Attachment Theory to relate inter-parental relationship quality and adolescent risky sexual behavior. These theories



focus on the child's emotional functioning in response to parent's ability to respond to their child's needs, as well as how children fair emotionally when parenting practices are disrupted due to inter-parental conflict. Children who experience inter-parental conflict in childhood are more likely to have anxious attachment styles and low emotional security (Bretherton, 1992; Lux & Walper, 2019). These traits in a child can lead to maladjustment later in life, like in adolescence (Bretherton, 1992). This study hypothesized that when the inter-parental relationship is better and in turn displayed more positive parenting practices, the child's adjustment is healthier and will lead to more favorable outcomes in adolescence, including regarding risky sexual behavior. Though results were not supported in the end, positive inter-parental relationship quality traits remain important to study due to the potential shortcomings of parenting practices when trust and communication are compromised.

### **Strengths and Limitations**

The use of a child's report for closeness can be considered a strength for this study because it considers the young child's contribution to the research. Some studies used reports of how often the child saw the dad as an indicator of paternal involvement, or used the report of a much older child (ages 15-18) for their report of closeness (Greene et al., 2016; Hernandez et al., 2007; Opondo et al., 2015). Using parent report for closeness could present problems as it could rely on using time spent with the father as an indicator. A child who spends every day with their father but has little to no quality interactions might not be as close as a child who sees their dad every weekend engaging in mutually liked activities, learning experiences, and bonding time. Additionally, another possible strength of the current study is that those studies mentioned earlier measured closeness

and risky sexual behavior simultaneously, this study focused on the child's report at age 9 to study father closeness as a predictor of risky sexual behavior at age 15. Child's report at age 9 could also be considered a limitation of the study considering that there could be a change in how close the child feels to their dad by the time they get to age 15.

A limitation of this study is the wording for the questions for children about paternal closeness. The wording is confusing and vague, as two of the measurements are "fairly close" and "quite close" and differentiating the two, especially for a 9 year old, can be difficult. This question also poses problems with understanding by the participants due to their age and what they think closeness means. This one dimensional question may not be sufficient in measuring paternal closeness. McElwain and Bub (2018) argue that positive feelings of closeness cannot only be measured by feelings of closeness but also other factors such as parent-child conflict, which was not measured here. Therefore, the measure of paternal closeness in this study is limited.

This study defined risky sexual behavior as whether or not the 15 year old had engaged in sex. Another study used additional factors such as condom use or multiple sex partners, which could be considered a broader, more comprehensive measure (James, et al., 2018). Of interest also may be sexual encounters that are not intercourse, such as oral sex or sexual touching. Though engaging in sex at an early age is considered risky due to outcomes affected by early sexual debut, not using a condom or engaging in sex with multiple partners in teen hood could pose more serious health risks. Even if a 14-15 year old is having sex, there is potential that they are using contraception and using safe sex practice.

Another limitation of the current study was that this study only used data from families that had answers for all of the independent variables ( $n=1699$ ), and not those who had one or more of the independent variable questions missing ( $n=1745$ ). As shown in the demographics section, the “has data” group, which was the one that was utilized, showed higher mean income, more fathers had higher education, a higher percentage of mothers were white, and both mother’s and father’s mean age was higher. Regarding mother’s marriage status to child’s father, 42 percent of the study group answered “yes,” to being married to the child’s father and only 11 percent of the excluded group answered “yes” to being married to the child’s father at age 9. This proposes glaring issues because just based on general demographics, as the “has data” group is at less risk than the “no data” group due to poverty, younger age, differences in race, and marital status to child’s father This could mean that the results of the study apply more heavily to the “has data” group and may differ from those from the “no data” group.

An additional limitation was that there were large amounts of missing data because a lot of the respondents did not answer at one or more wave, so the sample sized was forced to become smaller. There was also a significant amount of missing data in the regression for income, which could have potentially skewed results based on who did and did not report it. Due to the differences in demographics between the group who did and did not have independent variable data, this study was not generalizable to the entire Fragile Families Data set. However, these findings may apply to much of the real world. Many of the sample that were included in the study have similar circumstances to parts of society, due to the high levels of low income and one parent families.

## **Implications for further research**

This research added in adding to the existing literature regarding risky sexual behaviors in adolescents and positive inter-parental relationship quality as well as paternal closeness. Though this study did not find significant relationships between parent's perception of their relationship with the other parent and risky sexual behavior, researchers should consider this as a future direction of research with a few additional items of interest. Based on the findings from this study, there are changes that could be made to possibly better assess inter-parental relationships. Perhaps the child's perception of how the parent's relationship is at age 9 would aid in providing a more accurate picture of inter-parental relationship quality, as it is important for the outcome of risky sexual behavior to understand how the child perceives their child's relationship (Orgilés et al., 2015). Researchers should also consider asking about specific traits that might be helpful to assessing the closeness of father and child such as quality of time spent together from both the father and child. Another interesting route that researchers could explore could be asking the adolescents what they consider risky sexual behavior. This could potentially provide important information on what kind of education adolescents are receiving as a protective factor against risky sexual behaviors.

As much research as there is out there about adolescent and parent outcomes, the role of parents in their children's lives are forever changing. As society changes as a whole, the needs of adolescents will continue to change and researchers will need to examine these changes when looking at risk factors regarding risky sexual behavior. Our society has also become more progressive regarding the dynamics of families, which may lead to differences in inter-parental relationships. The majority of the parents in this study

were not married to one another, and this is becoming more prevalent today and can lead to parents choosing to co-parent. When done right, co-parenting can be a protective factor for all kinds of childhood outcomes due to decreased strain on each parent and the child's increased closeness with each parent instead of just one (Steinbach, 2018). This new prevalence of co-parenting could be a provoking reason to continue to do more research on the positive parental relationship qualities such as trust and communication. That being said, the results of this study point to race and education variables carrying more weight in being predictors of risky sexual behaviors in adolescents than does inter-parental relationship quality, so more research should be done to analyze these types of relationships within homes with racial and educational disparities.

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