How Adolescents Perceive their Parents' Communication about Sex: Toward Reducing Adolescent Sexual Risk

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HOW ADOLESCENTS PERCEIVE THEIR PARENTS' COMMUNICATION ABOUT SEX: TOWARD REDUCING ADOLESCENT SEXUAL RISK

By

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A DISSERTATION

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HOW ADOLESCENTS PERCEIVE THEIR PARENTS’ COMMUNICATION ABOUT
SEX: TOWARD REDUCING ADOLESCENT SEXUAL RISK

Amanda Holman, Ph.D.
University of Nebraska, 2014

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The “sex talk” is often one of the most challenging conversations for parents and children during adolescence. Research has established that parent-adolescent communication about sex can greatly reduce adolescents’ sexual risk (Guilamo-Ramos et al., 2012; Miller, Benson, & Galbraith, 2001). However, many parents still avoid these conversations due to uncertainty or lack of confidence in how to best educate their children on topics such as sexual health and relationships. Plus, little is known about family communication about sex from the adolescent perspective. In order to develop more comprehensive strategies for parents to engage in these challenging conversations, the present dissertation examined adolescents’ perceptions of parent-adolescent communication about sex, including what adolescents report that their parents say about sex, the degree to which these messages are perceived as effective and competent by adolescents, and how parental messages as well as the larger family environment relates to sexual risk.

One hundred and fifty-nine high school adolescents ($M$ age = 16.66 years) completed an online survey about actual and ideal parent-child conversations about sex, as well as adolescents’ perceptions of attitudes, behaviors, and family communication climate related to sexual risk. Through inductive analyses, six parent-adolescent conversation themes emerged, including safety, underdeveloped/unsuccessful,
warning/threat, no talk, comprehensive-talk, and wait. Adolescents’ perceived comprehensive-talk and safety conversations as most competent and effective compared to other conversation themes. In addition, results revealed five themes related to ways parents could have made the conversations ideal, including no change, be more specific/provide guidance, talk to me, collaborate, and appropriateness. Besides assessing these themes as separate units of information, further analyses revealed distinct patterns between the actual and ideal conversation themes. The analyses also showed that perceived parental communication competence and effectiveness were the strongest negative predictors of adolescents’ permissive sexual attitudes and sexual risk-taking; whereas peer communication frequency was a significant positive predictor in adolescents’ permissive sexual attitudes and sexual risk-taking. Overall, family communication climate (e.g. conversation orientation and conformity orientation) was unrelated to adolescents’ sexual risk. The implications for these findings are provided, as well as limitations and future recommendations for researchers and parents.
DEDICATION

This dissertation is dedicated to the love of my life and best friend, Will.
AUTHOR’S ACKNOWLEDGEMENTS

This dissertation study would not have been possible without the numerous individuals that provided encouragement, guidance, insights, and love throughout this amazing journey. I owe this accomplishment to all of you.

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CHAPTER ONE
RATIONALE AND PREVIOUS RESEARCH

Introduction

Every family creates its own relational culture (Wood, 1982) that includes agreed upon explicit or implicit rules about what topics can be discussed. One of the most challenging conversations both parents and children report during adolescence is the “sex talk” (Guerrero & Afifi, 1995; Jerman & Constantine, 2010; Warren, 1995). Talking about sex-related topics can elicit a wide range of responses and emotions from both parents and adolescents. Research on parent-adolescent sexual communication dates back almost three decades. It is well established that parent-adolescent communication can greatly reduce the likelihood that adolescents will engage in risky sexual behavior (see Miller, Benson, & Galbraith, 2001 for review). Much of the research has shown that the more parents discuss sex, pregnancy, birth control, and sexually transmitted infections (STIs) with their adolescents, particularly if they discuss these issues early, the more likely their adolescents are to delay their sexual debut and less likely adolescents will be to engage in risky sexual behavior (e.g., Booth-Butterfield & Sidelinger, 1998; Guilamo-Ramos et al., 2012; Miller, 2002; Miller et al., 2001). Despite the evidence that parent-child communication about sex-related topics helps adolescents make sense of sex, many parents shy away from these discussions citing discomfort, lack of knowledge, and general communication issues as deterrents (Jerman & Constantine, 2010). Certainly, parents want to help socialize their children on topics such as sexual health and relationships, yet these anticipated conversations leave many parents uncertain and anxious about what to say and how to say it.
One way to provide strategies to parents that can help them feel more comfortable engaging in parent-adolescent communication about sex, is for researchers to spend less time on what communication strategies *parents* believe are effective and focus more efforts on how *adolescents* perceive these conversations. As such, the purpose of the present study is to examine *adolescents’ perceptions* of parent-adolescent communication about sex, including what the adolescents’ parents say about *sex*, what types of messages adolescents perceive as effective and competent, and how those parental messages as well as the larger family environment relates to sexual risk.

Prior to the present study, limited attention has been given to adolescents’ perceptions surrounding parent-adolescent communication about sex-related topics. This is true even though scholars have argued that in order to develop a comprehensive understanding of family communication the voices of children need to be a priority in current research efforts (Miller-Day, Pezalla, & Chesnut, 2013; Socha & Yingling, 2011). Communication research needs to “pay more attention to the ways in which communication is organized and experienced during the teenage years” and how adolescents perceive communication from adults (Williams & Thurlow, 2005, p. 10). In research on adolescents’ substance abuse, for example, communication scholars have used adolescents’ experiences with drug offers and drug resistance strategies as the foundation to develop and implement successful interventions (e.g., keepin’ it REAL) with parents, adolescents, and school leaders (see Hecht & Miller-Day, 2007 for review). Thus, knowing how adolescents successfully resisted drug offers, researchers were able to design interventions to help parents and teens.
Adolescents’ experiences surrounding conversations about sex-related topics, particularly the type of content used in these conversations may be important to adolescents’ sexual risk-taking and permissive sexual attitudes. Research has found that an individual’s perceptions about the content of family communication (e.g., message type, story content) are important to family functioning and well-being (e.g., Koenig Kellas, 2005; Vangelisti, Crumley & Baker, 1999; Vangelisti & Young, 2000). However, parents and adolescents commonly have different perceptions of communication within the family (Sillars, 1998) and these perceptions may play a role in what content adolescents and parents view as most helpful. For example, Feldman and Rosenthal (2000) found parents tend to evaluate the success of the sex talk based on their own motivation to engage in the conversation and demonstrate concern for their children. In contrast, adolescents tend to base their evaluations primarily on the communicative behavior of their parents, rather than their parents’ intentions or concern. As a result, scholars argue that adolescents’ perception of how their parents communicate about sex, rather than how the parents think they are communicating is more important in having an effect on adolescents’ attitude and behavior about sex (Beckett et al., 2010; Feldman & Rosenthal, 2000).

Based on Feldman and Rosenthal’s study (2000) perceptions of parental competence, or the degree to which a parent is able to communicate effectively and appropriately during communication about sex, may play an important role in determining an adolescent’s willingness to accept the parents’ messages as credible. Research has established that in order to be a competent communicator, one must be able to be effective (i.e., achieve a certain goal) and meet expectations in a given interaction.
Moreover, communication competence is relational in nature suggesting that although one person may view his or her own communication as competent, others in the interaction may not (Spitzberg, 1983). For example, Afifi, Joseph, and Aldeis (2008) found that adolescents’ perceptions of their parents’ communication competence negatively related to the adolescents’ anxiety and avoidance of sex-related topics. In other words, when adolescents believe their parents demonstrate fundamental communication skills they are less afraid to talk about sex-related topics with them.

When it comes to communication about sex, parents and adolescents may have different views on what constitutes competent and effective communication about sexual behaviors and risks. Since competence is a relational process that involves multiple perceptions from all parties in the conversation (see Spitzberg & Cupach, 1984), the adolescents’ perspectives of their parents’ competence and effectiveness – currently missing from the literature – may be the key in guiding parents towards positive sex-related communication that helps reduce adolescents’ sexual risk-taking.

In order to better understand adolescents’ perceptions of parental communication about sex-related topics, it is also necessary to understand the ways in which those perceptions are embedded in the lived experiences of the larger family dynamics and communication climate. To provide more contextual picture of parent-adolescent communication about sex, research needs to consider the consistent factors that reduce sexual risk during adolescence within the larger family climate to provide information that can help families deal with a difficult conversation in a variety of contexts. For example, previous research has devoted substantial attention to a variety of individual
and relational factors in understanding parent-child communication about sex (see reviews by Guilamo-Ramos et al., 2012; Miller, 2002; Miller et al., 2001) and indicates that relational closeness and conversation frequency about sex-related topics are two of the most consistent factors in predicting adolescents postponing sexual debut, having fewer partners, and increasing safe-sex practices and knowledge (Miller et al., 2001).

Despite the utility of these findings, little research has evaluated how these factors matter within a larger discursive family climate. The knowledge that closer relationships and more frequent communication reduces risk may not help parents who shy away from such talks because they do not know how to best approach sex-related topics, particularly in the context of a developmental period in which closeness may wane in favor of independence (Smetana, 2010). In an effort to understand a more contextual picture of why parents choose – or do not choose – to talk to their adolescents about certain sex-related topics, scholars need to examine how adolescents’ perspectives of communicative and relational factors fit within the larger family climate, known as family communication patterns (FCP) (Koerner & Fitzpatrick, 2002c).

Family climates can be understood as unique shared worldviews, or schemata, shared among family members (Fitzpatrick & Ritchie, 1994). These schemata emerge from how family members interact, and ultimately shape how parents and children perceive their social environment and communicate within and outside the family context (Koerner & Fitzpatrick, 2002a). Through decades of examining parent-child communication (or schemata) the theoretical construct of family communication patterns emerged (McLeod & Chaffee, 1972) and became integral in understanding the link between the family communication environment and individual behavioral and
psychosocial outcomes (see Schrodt, Witt, Messersmith, 2008, for review). Because of this, FCP is a useful theoretical lens for understanding how the overall family communication environment links to parent-adolescent sex-related conversations, perceptions of effectiveness and competence, and adolescents’ sexual risk.

Family communication patterns suggest that dimensions of family communication climate, namely conversation and conformity orientations, help explain how families negotiate communication during adolescence. Conversation and conformity orientations facilitate family adaptability and cohesion as families negotiate parent-child relationship change (Koerner & Fitzpatrick, 2002c; Schrodt, 2005). Conversation orientation refers to parental encouragement of unrestrained interactions, whereas conformity orientation refers to an emphasis on uniformity of beliefs and adolescent obedience. Several studies to date confirm the expected link between FCP dimensions and socialization of adolescents in a wide variety of areas, such as conflict management (Koerner & Fitzpatrick, 1997, 2002c), communication competence (Koesten, 2004), perceptions of romantic behavior (Fowler, Pearson, & Beck, 2011), and attitudes and behaviors concerning risk behavior (Booth-Butterfield & Sidelinger, 1998; Koesten & Anderson, 2002; Miller-Day, 2008). Yet, FCP have yet to be applied to understanding parent-child communication about sex. This gap is important to address because there is no one ideal way for parents and adolescents to engage in dialogue about sex. However, by understanding the larger discursive patterns within a family, scholars can understand the diverse effective/ineffective strategies used in different communication climates. As a result, understanding these diverse strategies may further explain adolescents’ attitudes
and behaviors surrounding sexual risk-taking and potentially help researchers develop interventions tailored to family climate.

The current study serves as a first step in a long-term program geared towards developing more effective parent-adolescent sex talk interventions. In the dissertation, it is argued that knowledge for shaping these interventions can be gained from investigating adolescents’ perceptions of what their parents say, what type of messages they perceive as effective in reducing risk behavior, and how family communication patterns play a role in adolescents’ socialization towards sex. The study takes two steps towards this goal. First, it describes what parents convey to their adolescents during sex-related communication by focusing on three fundamental features—the content of the messages adolescents report hearing from their parents, adolescents’ perceptions of their parents’ discursive strategies as competent and effective, and how the messages and perceptions relate to adolescents’ behaviors and attitudes. Second, the dissertation examines the parent-adolescent factors and larger discursive patterns within the family that may help to explain adolescents’ perceptions of the sex talk, along with their attitudes and behaviors towards sex.

The remainder of Chapter One reviews literature on the importance of communication about sex during adolescence, examines the challenges in parent-adolescent communication about sex, discusses adolescents’ sources of sexual knowledge, and then argues for the clear need to further examine adolescents’ perceptions of what parents say in conversations about sex and what characteristics they view as effective or ineffective in the parents’ conversation. The last part of Chapter One reviews FCP theory as a theoretical and empirical framework for better understanding family socialization
about sex and how adolescents’ perceptions of content, effectiveness, and parent-child relational factors play a role within the larger FCP climate.

Chapter Two reviews the methods of the current study, including high school participant recruitment strategies, participant characteristics, study procedures, and a description of the measures on the online-survey. Chapter Three reports the results from the statistical analyses, as well as the thematic analysis of adolescents’ reports of parents’ communication about sex. Finally, Chapter Four provides a discussion of the results, offering interpretations of the findings, limitations, and recommendations for future researchers and parents.

**The Importance of Sexual Communication During Adolescence**

**Adolescence and Sexual Health**

Most empirical research has separated adolescence into three developmental periods—early adolescence (ages 10-13), middle adolescence (ages 14-17), and late adolescence (age 18 into the early twenties) (Smetana, Campione-Barr, & Matzger, 2006). It is during adolescence when most individuals become aware of sexuality and start to have sexual thoughts and engage in sexual activity (Beckett et al., 2010; Crockett, Raffaelli, & Moilanen, 2003). A major goal for parents at this time is the promotion of sexual health across the lifespan. The World Health Organization (2002) defines sexual health as,

A state of physical, mental and social well-being in relation to sexuality. It requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasure and safe sexual experiences, free of
coercion, discrimination, and violence\(^1\). (p. 4)

Although sexuality is a normal and healthy part of adolescent development (Chilman, 1990), sexual risk taking and permissive sexual attitudes are a major concern with parents, schools, and health care professionals. **Sexual risk taking** is commonly defined as early (e.g., prior to middle adolescence) sexual debut, unprotected sexual or oral intercourse, having multiple sexual partners, or engaging in sexual behavior under the influence of alcohol or drugs (Downing-Matibag & Geisinger, 2009; Guilamo-Ramos, Jaccard, Dittas, Gonzalez, & Bouris, 2008; Holman & Sillars, 2012; Huebner & Howell, 2003). Related to sexual risk-taking, a **permissive sexual attitude** is often described as less conventional beliefs and values towards premarital sex, as well as more tolerance of casual sex, unprotected sexual activity, and multiple partners (Hendricks & Hendricks, 1987; Sprecher, McKinney, & Orbuch, 1991). Previous research has argued that sexual attitudes often guide individuals’ behaviors and evaluations of sexual expressions, activities, and relationships (Guerra, Gouveia, Sousa, Lima, Freires, 2012: Hendricks & Hendricks, 1987). Because the present study evaluates high school age adolescents – many who may not be in an intimate relationship – it is important to evaluate both sexual behavior and attitudes towards sexual behavior (i.e., **permissive sexual attitudes**) to best capture adolescents’ experiences surrounding sex.

Sexual risk taking and permissive sexual attitudes in adolescence are a concern for a number of reasons. At the dawn of the 21\(^{\text{st}}\) century, the United States Surgeon General David Satcher emphasized the importance of sexual health stating, “sexuality is an integral part of human life” and “sexual health is inextricably bound to both physical

\(^1\) This *working definition* is a result of the World Health Organization (WHO)- a convened international technical consultation of sexual health in January 2002. It was developed by experts in different areas of sexual research and does not represent an official WHO position.

\(^2\) School district information is at www.lps.org/about/profiles (updated, April 2013).
and mental health” (Satcher, 2001, p. 357). Decreasing the number of teenage pregnancies and sexual transmitted infections (STIs) and increasing the percentages of early and middle adolescents who remain sexually abstinent are major health goals for many parents, school leaders, and health professionals (Guttmacher Institute, 2012).

The need to address adolescent sexual health is further emphasized by research which shows that seven out of ten adolescents have engaged in sexual intercourse by age 19 and nearly 50 percent of adolescents between 15-19 years old have had sex at least once (Guttmacher Institute, 2012). Despite the decline in adolescent pregnancies over the past twenty years, there are still approximately 750,000 United States females between the ages of 15-19 who become pregnant annually (Centers for Disease Control and Prevention [CDC], 2009). The United States’ adolescent pregnancy rate remains one of the highest in the developed world (Guttmacher Institute, 2012). For example, 82 percent of adolescent pregnancies are unplanned and make up 20 percent of unplanned pregnancies overall that occur annually in the United States (Finer & Henshaw, 2006).

The risk does not end with pregnancy. Among adolescents who are sexually active, almost 35 percent report not using a condom and only 20 percent describe themselves or their partner as using birth control during their last sexual activity (CDC, 2009). The 2011 Youth Risk Behavior Survey revealed that 47 percent of students in grades 9 to 12 have engaged in sexual intercourse and 40 percent of currently sexually active high school students did not use a condom at their last sexual intercourse (Eaton et al., 2012). In addition, adolescents, compared to other age groups who are sexually active, have the highest rate of STIs (CDC, 2009; Guttmacher Institute, 2012). Adolescents represent only 25 percent of the sexually active population in the United States, yet “they
account for nearly half (9.1 million) of the 18.9 million new cases of STIs each year due to lack of accurate safe sex information prior to engaging in oral or sexual intercourse (CDC, 2010; Weinstock, Berman, & Cates, 2004, p. 8). Thus, the present study seeks to increase understanding of these health concerns from an adolescents’ perspective and identify effective strategies to reduce sexual risk during adolescence.

Research has also found an association between psychological factors (e.g., self-esteem, emotional distress) and risky sexual behavior and permissive sexual attitudes. In a longitudinal study on adolescent females, Ethier et al. (2006) found that adolescents who reported lower self-esteem and higher emotional distress (i.e., depression, anxiety, and hostility) were more likely to initiate sex at an earlier age, have more sexual partners per year, and self-report engaging in unprotected sex.

In short, adolescents are at high risk for teen pregnancy, STIs, and psychological stress associated with risky sexual behavior, therefore, sexual health remains an important concern in the United States. Based on these physical and psychological concerns, parents, educators, and health professionals need more communicative strategies to promote information about sexual relationships, emotional well-being, and health in hopes of reducing adolescents’ permissive sexual attitudes and sexual risk-taking. In order to better understand the need associated with developing communicative interventions, in what follows, the research on adolescents’ current sources of information relative to sexual health is reviewed. Moreover, based on this review, parents are positioned as a primary source, whose communication efficacy must be further investigated and addressed.
Adolescents discern information, values, and societal norms about sexual attitudes and behaviors from multiple sources, including religious institutions, media, schools, peers, and family (Shtarkshall, Santelli, & Hirsch, 2007). Much of the research has found that family environment, particularly parent-adolescent communication, is widely viewed as a foundation of an adolescent’s sexual socialization and education, and positively influences adolescents’ sexual health outcomes (DiClemente et al., 2002; Guilamo-Ramos et al., 2011; Shtarkshall et al., 2007), including less risky behavior in adolescence (Jaccard, Dodge, & Dittus., 2002; Karofsky, Zeng, & Kosorok, 2001). However, parent-adolescent communication has also been shown to moderate and mediate the relationships between other sources and adolescents’ sexual risk taking. For example, research has found that adolescents who talk with their parents were less likely to be influenced by other sources (Bleakley, Hennessy, Fishbein, Coles, & Jordan, 2009; Whitaker & Miller, 2000). Although parents often act as gatekeepers to children’s information outside the family and parent-child communication is the focus of the current dissertation, exposure to non-family sources increases greatly during adolescence and it is important to review the main non-family sources as they interact with and relate to parents’ role in adolescents’ sexual socialization. The following section briefly reviews non-family sources including religious, media, educational, and peer influences. Doing so enables the argument for positioning parents as the primary socializing agents for adolescents’ knowledge about sex. Ultimately, parents work in conjunction with, or sometimes in spite of these “outside” sources, which is central to the long-term purpose...
of this dissertation to develop interventions that help parents play a positive role in their adolescents’ sexual development despite other significant sources.

**Religious influences.** Many religious organizations in the United States encourage adolescents to abstain from premarital sex, masturbation, and pornography (Regnerus, 2005). Research suggests that some aspects of adolescents’ religion (e.g., attending church, the importance of faith) correlate with more conservative sexual attitudes, later sexual debut, and lower number of sexual partners (Thornton & Donald, 1989; Murry, 1994). Afifi et al. (2008) found that religious adolescents talked explicitly about how their sexual attitudes and behaviors were directly related to their religious beliefs to abstain from sex until marriage. In a study that examined adolescents’ different sources of sexual knowledge, results showed that adolescents who used religious leaders (i.e., ministers, priest, or rabbis) as their main source of information about sex were more likely to view sex as risky and dangerous (Bleakley et al., 2009). Yet, less than 10 percent of adolescents in that study cited religious leaders as a primary source of sexual socialization.

Although religion or religious leaders may play a role in adolescents’ sexual socialization, parents often pass down religious values to their children. Regnerus (2005) developed a conceptual model to examine the link between religious families and communication about sexual intercourse. The study found that parents commonly used church attendance, youth groups, and/or Bible studies as ways to passively socialize their child’s attitudes or values rather than through direct communication. Findings also show that devoutly religious parents are much less likely to talk about sexual intercourse or birth control and primarily relied instead on broader religious sexual values (e.g.,
abstinence). Adolescents in the same study also reported these broader ideologies as unhelpful in understanding sexual risk-taking or sexual health. Overall, few adolescents describe religious leaders or religion as a primary source of information, but parents seem to use religious values as a foundation to talk about sexual relationships and information; thus, parents likely remain at the heart of religious influence.

**Media influences.** In addition to religious influences, much of adolescents’ sexual knowledge comes from sexual images, sexual behavior, and sex talk shown in the media. Brown, Keller, and Stern (2009) argue that traditional media (television, radio, movies), as well as new digital media (the internet, social networking sites such as Facebook, Myspace), play an important role in adolescents’ sexuality and sexual behaviors. Brown and L’Engle (2009), for example, found that exposure to pornography predicted sexual uncertainty, less contraception use, and earlier sexual debut. Similarly, Ward and colleagues found that greater exposure and greater involvement with sexually explicit television during adolescence were related to permissive sexual attitudes, higher expectations of sexual activities of friends, and more sexual experiences (Ward & Rivadeneyra, 1999; Ward & Friendman, 2006). For instance, results indicated that the more frequently adolescents viewed prime-time television programs (e.g., Sex and the City) and music videos with sexual content the more likely they viewed casual sex as a normal part of dating relationships (Ward & Friendman, 2006). Bleakley et al. (2009) also found, that “using media (i.e., television, movies, music, internet, magazines, and videogames) as a source of sexual information was associated with adolescents’ increased efficacy belief that they could overcome barriers in order to have sex” (p. 7). In
others words, adolescents who received much of their information from the media also saw engaging in sexual behavior as a normal part of adolescence.

Holman (in progress), however, found that parents often monitor what media adolescents have access to; when adolescents were exposed to sexual images from the media, parents often used these moments to talk to their children about relationships or sex. Thus, although influential, mediated information about sex is sometimes also filtered through parental communication.

**Educational influences.** Many adolescents also receive basic sexual knowledge from school-based sex education programs during or before entering middle school. The main goal in many of these school-based sex education programs is to increase abstinence among adolescents, delay the initiation of first sexual intercourse, reduce number of sexual partners, and/or increase condom or other forms of birth control use (Kirby & Laris, 2009). In most schools, these programs are taught by a teacher, outside expert, older student, or a combination of all three groups (Kirby & Laris, 2009, Wight et al., 2002). Interestingly, in a study that examined how sources of sexual information are related with adolescents’ attitudes and beliefs, Bleakley et al. (2009) found that sexual education provided by teachers had no statistically significant relationship with adolescents’ beliefs about sex. Although some research has found curriculum-based sex education and STI/HIV programs to be moderately associated with decreasing adolescents’ risky sexual behaviors (e.g., unprotected sex) (Kirby & Laris, 2009), other research suggests that current school-based sex education programs have little effect on adolescents’ views of sex and sexual behaviors (DiCenzo, Guyatt, Willan, & Graffith, 2002; Wight et al., 2002). Shtarkshall et al. (2007) argued that if schools and parents
could share the responsibility and work together to teach about sexual behaviors and values, adolescents would receive more consistent messages about sex throughout adolescence. Collaboration to create consistent messages between home and school may decrease confusion about risky sexual attitudes and behaviors and provide adolescents with the information they need to become sexually healthy individuals. This, however, may be thwarted by the fact that parents may not talk to their children about sex and sexual health because they assume their children will receive that information in school. This could be problematic as most high schools provide the human development unit in the sophomore year during which adolescents are already 15 and 16 years old, a time when many adolescents are already sexual active (CDC, 2009). Although these units may be helpful, educators may have missed the opportunity to delay sexual debut or encourage safe sex practices (Eisenberg et al., 2005). Thus, parental communication assumes primary importance.

**Peer influences.** Even though many adolescents receive school-based education, adolescents commonly seek more detailed information or stories about sex from their peers (Heisler, 2005; Holman, in progress). Adolescents reported receiving more sexual information from their friends compared to other sources (media, religion, parents) (Bleakley et al., 2009; Heisler, 2005), and peer influence is known to be a major contributor to risky behavior, generally, in adolescents and adults (Dorsey, Scherer, & Real, 1999). For example, Dorsey et al. found that adolescents who mostly talked to their peers about drinking compared to other sources (e.g., parents) reported drinking in excess because peer communication normalized the risks associated with binge drinking.
Adolescence may be a time when an individual is more vulnerable to peer influence, as adolescents want to “fit in” and be accepted by their friends and classmates. For example, peers have been shown to play a role in adolescents’ sexual decision-making about timing of first sexual experiences (Balalola, 2004) and romantic development during adolescence (Connolly, Furman, & Konarski, 2000). When adolescents use friends as their main source of sexual information they have been more likely to believe that the majority of their peers were having sex and they themselves engaged in sexual behavior (Balalola, 2004). In addition, recent communication research on non-relationship sex found that the frequency of communication about risky sexual behavior with peers increases the likelihood a person would engage in those potential risky behaviors (Holman & Sillars, 2011). In other words, communication with peers may normalize sexual risk-taking. Although peers exert much influence, research has found that adolescents who talk to their parents about sex are less likely to be influenced by peers (Whitaker & Miller, 2000) or the media (Bleakley et al., 2009). Whitaker and Miller, for example, found that peer influence on the decision to engage in unprotected sexual intercourse was more influential for adolescents who had not discussed sex or condom use with parents.

As illustrated throughout the discussion above, although sexual socialization and education does take place outside the family, the majority of the research on sexual communication has found that parents play a critical role in how “outside” socialization impacts adolescents’ sexual attitudes and behaviors (Acker, Holland, & Bost, 2011; DiClemente et al., 2001; Miller, 2002; Miller et al., 2001; Shtarkshall et al., 2007,
Whitmaker & Miller, 2000). Therefore, the following section highlights the research on parental influence on sexual socialization during adolescence.

**Parental influences.** Over three decades of research have established that parents can greatly increase adolescents’ knowledge of sex-related topics and reduce the likelihood that adolescents will engage in risky sexual behavior (Booth-Butterfield & Sidelinger, 1998; Guilamo-Ramos et al., 2012; Miller, 2002; Miller et al., 2001). In particular, parent-child closeness, frequency of conversation about sex, and parent-adolescent sex differences have emerged consistently as factors important to understanding the link between parent socialization and child attitudes and behaviors towards sex (see reviews by Guilamo-Ramos et al., 2012; Miller et al., 2001). Yet, the extant communication research looks almost exclusively at parents’ perceptions or emerging adults’ perceptions. Thus, the current understanding of adolescent sexual risk and how parents communicate may be limited to adults’ reports. Because recent parent-adolescent dyadic studies have found parents and adolescents have somewhat different perceptions (e.g., Jerman & Constantine, 2010), an adult-centric focus may be inadequate for identifying the full range of elements associated with effective parent-child sex talks. Unlike previous research, the current study examines the adolescent’s point of view. This will help emphasize what characteristics of the parent-child relationship and communication adolescents’ perceive as helpful in their own sexual development. In the following section, parent-adolescent communication frequency, closeness, and biological sex differences are reviewed as important elements between parent socialization and adolescent attitudes and behaviors towards sex.
**Frequency.** Frequency of parent-child communication about sex is the most common variable used to study parental impact on adolescents’ sexual attitudes and behaviors (Afifi et al., 2008; Miller et al., 2001). For example, the more parents discuss topics, such as, sex, pregnancy, STIs/AIDS, and birth control with their adolescents the less likely adolescents will be to engage in risky sexual behavior and the more likely they will be to delay their first sexual interaction (e.g., Booth-Butterfield & Sidelinger, 1998; Guilamo- et al., 2011; Guzmán et al., 2003; Huebner & Howell, 2003; Jaccard et al., 2002; Karofsky, Zeng, & Kororok, 2001). Although frequency seems to play a positive role in reducing adolescent risky behavior, there is some evidence that the opposite is true (e.g., DiLorio, Pluhar, & Belcher, 2002; Whitaker & Miller, 2000) and that parents’ talking about sex has been linked to increased rates of sex by adolescents (Fingerson, 2005; Manning, Longmore, Giordano, 2005), particularly if adolescents model their parents’ casual attitudes and behaviors about sex and sexuality (Dittus, Jaccard, & Gordon, 1999).

Recent research has also found that repetition of sexual discussion is associated with adolescents being more open and feeling closer with their parents, which in turn relates to less risk taking (Martino Elloitt, Corona, Kanouse, & Schuster, 2008). This finding may suggest that a one-time conversation about sex is unlikely to be as effective as parents who engage in repeated conversations about sex-related topics. Popular culture has created the myth of having the “sex talk” and this often leads parents to believe that if they “get it over with” and have this one-time talk, their adolescents will understand sex and sexuality. Despite this, most research has shown frequency of parent-adolescent communication about sex is positively related to adolescents’ relationship and
communication satisfaction with parents and negatively related to sexual risk (Guzmán et al., 2003; Huebner & Howell, 2003). As adolescents are exposed to “outside sources” and negotiate sexual decisions, it is important to know how they view parental communication frequency from their perspective. Thus the following hypothesis is proposed to investigate the importance of frequency from the adolescent’s perspective:

H1: Frequency of parent-adolescent communication about sex will be negatively related to adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes.

Despite the value of examining the direct link between parent-child communication frequency and adolescent risk behaviors, the current study also considers how peer communication might interact with parental communication in the process of socialization about sex (Holman & Sillars, 2011). As previously mentioned, adolescents commonly report receiving more sexual information from their peers compared to all other sources, including parents (Bleakley et al., 2009; Heisler, 2005). Peer communication has also been found to normalize risk associated with drinking and sexual behavior (Dorsey et al., 1999, Holman & Sillars, 2011). These findings suggest that adolescents who report frequent conversations about sex-related topics with their peers would also report more risky attitudes and behaviors about sex, therefore the following hypothesis is presented:

H2: Frequency of peer-adolescent communication about sex will be positively related to adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes.
At the same time, research shows that when adolescents report talking with both parents and peers about sex-related topics, parental communication moderates the relationship between peer communication and attitudes and behaviors surrounding risk (Whitaker & Miller, 2000). Thus, it is also hypothesized that:

H3: Frequency of parent-adolescent communication about sex will decrease the association between the frequency of peer communication and adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes.

In sum, previous research shows that frequency of communication is an important feature of parental communication in minimizing adolescents’ sexual risk-taking. However, the previous research on communication frequency about sex-related topics has yet to establish a uniform or consistent effect on adolescents’ sexual risk that hold across parent or adolescent reports (Miller et al., 2001). As a result, the current study attempts to replicate previous findings, while looking specifically at adolescents’ perspectives of communication frequency and sexual risk.

**Closeness.** In addition to frequency, research demonstrates the importance of parent and adolescent relational closeness on adolescents’ sexual health. Indeed, relational closeness with parents is one of the most stable predictors of adolescents’ future sexual attitudes and behaviors (Miller et al., 2001). Parent-adolescent relational closeness and satisfaction are associated positively with adolescents delaying their sexual debut, engaging in less frequent sex, and having fewer sexual partners (e.g., Miller, 2002; Miller et al., 2001). This has been supported for both daughters and sons (Jaccard, Dittus, & Gordan, 2000). In a systematic review of the family’s role in adolescent sexual behavior, Miller (2002) found “the most consistent finding across studies of family
processes or relationships is that parent-child connectedness (parental support, closeness, and warmth) is related to lower adolescents’ pregnancy risk, primarily through delaying and reducing adolescents’ sexual intercourse” (p. 25).

Closer parent-adolescent relationships are also more likely to be characterized by higher quality and more frequent conversations. For example, studies have shown that parent-adolescent communication about sex-related topics is easier when the relationship is built on open and recurring communication (Feldman & Rosenthal, 2000; Jaccard et al., 2000; Martino et al., 2008). Again, however, much of the research on closeness has been from the parent’s or emerging adult’s perspective. Parents and emerging adults may assess closeness differently as compared to adolescents, particularly given the independence and distancing that characterizes the parent-child relationship in adolescence (Smetana, 2010; Steinberg, 2001). Thus, the current study further examines how closeness in the parent-adolescent relationship predicts adolescent risky behavior and attitudes towards sex from the adolescents’ perspectives by posing the following hypothesis:

H4: Parent-adolescent relational *closeness* will be negatively related to adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes.

**Biological sex differences.** Previous research has also identified the link between parent-child sex differences and adolescents’ sex-related communication, attitudes, and behaviors. To date, most parent-based research has focused on the role of mothers in socializing adolescents’ sexual attitudes and behaviors (Guilamo-Ramos et al., 2012). Mothers tend to volunteer more for empirical studies than fathers so findings on paternal
communication factors and involvement tend to be limited. Taking this into consideration, the evidence is clear that, for the most part, mothers communicate with adolescents about sex more than fathers (e.g., Fox & Inazu, 1980; Guilamo-Ramos et al., 2012). Guerrero and Afifi (1995) found children report less avoidance with mothers as compared to fathers on topics of romantic or sexual relationships. Adolescents perceive they can be more open in communication with their mothers than with fathers (Guerrero and Afifi, 1995; Laursen & Collins, 2004). Laursen and Collins (2004) also argued that there may be more open communication about sex with mothers than fathers due to mothers being perceived as more approachable on relational topics, whereas fathers are viewed as a source solely for information or material support. The emphasis on mothers may also be because mothers are commonly viewed as the parent primarily responsible for providing information on sexual education and relationships within the family context (Coffelt, 2010). Consequently, in many families, mothers take on the role as “sex educator” and are more likely than fathers to communicate with adolescents about sex (Coffelt, 2010; Guilamo-Ramos et al., 2012), thereby potentially increasing the challenges that mothers face in parent-child communication about sex.

Research has found other sex differences as well. For example, daughters, in comparison to sons, are more likely to be the recipient of conversations about sex (Guilamo-Ramos et al., 2007). According to Coffelt (2010), mothers and daughters feel some tension in discussing sex, but the mother-daughter dyad seems to more frequently discuss sex and sexual information than any other combination of family members. In a study on mother-daughter dyads, Guilamo-Ramos et al. (2008) found mothers were more likely to engage in conversations about sex with their adolescents when they felt
knowledgeable in answering questions, not embarrassed, felt comfortable and confident, and that they were being a responsible parent.

Although there is more empirical evidence on the role of maternal communication on parent-child relationships than paternal communication, a few studies have shown that although communication between fathers and children may be scarce and uncomfortable, these conversations do impact children’s decisions about sex (Kirkman, Rosenthal, & Feldman, 2002; Lehr, Demi, DiLorio, & Facteau, 2005). In a synthesis of research on father-child communication about sex, Wright (2009), for example, found that fathers communicated about sex more with sons than daughters. However, when fathers do talk about sex with their daughters, the fathers usually discuss resisting sexual pressure from partners and the development of sexual values, which are commonly based on religion or the fathers’ moral values. In a more recent review of research, Guilamo-Ramos et al. (2012) found that the frequency of father-adolescent communication positively predicted consistency of condom use and negatively predicted risky sexual behavior. In addition, paternal disapproval of adolescent sexual behavior was related to reducing and delaying adolescent sexual debut. Overall, the few studies on father-child communication have found that fathers can reduce the likelihood that their children will engage in risky sexual behavior (Kirkman et al., 2002; Lehr et al., 2005).

In sum, when it comes to sex differences, most empirical research shows mothers talk more with their adolescent about sex than fathers and that mothers are commonly viewed as more competent communicators about sexual topics than fathers (Coffelt, 2010; Guilamo-Ramos et al., 2012). However, less is known about adolescents’ reports of which parent is more likely to talk to them about sex-related topics. Understanding the
adolescents’ perspective may contribute to the current literature and develop interventions to help mothers and fathers competently talk to their children about sex. Thus, the following research question is proposed:

RQ1: Does adolescent sex predict differences in the parent (e.g., mother, father, both) adolescents report talking to about sex-related topics?

Summary. As illustrated in the section above, communication frequency, parent-child closeness, and sex differences have been well established as factors linked to adolescents’ sexual risk. Some scholars have argued that inconsistencies still exist in measuring communication frequency, closeness, and sex differences (e.g., Miller et al., 2001) warranting further investigation, especially from an adolescent perspective.

The factors previously mentioned are well-established in the literature, but given the alarming statistics surrounding adolescent sexual behavior, clearly more research is needed to understand how parent-adolescent communication plays a role in adolescents’ sexual risk-taking and permissive sexual attitudes. Moreover, there is little guidance on when to talk to their children and what exactly to say about sex-related topics to reduce sexual risk. The following section reviews these challenges parents face in talking to their children about sex-related topics, thereby further informing the need for the current study: understanding parent-child communication about sex from the adolescents’ perspective.

Challenges of Parent-Adolescent Communication about Sex

Even though research supports the important role parents play in talking to their children about sex and sexuality, parents tend to avoid engaging in discussions about safe sex practices, general sexual health, or emotions related to sex (Guilamo-Romos, 2008;
Warren, 1995). Parents want to play a critical role in educating their adolescent children about sex, but they doubt their ability to effectively discuss sex with their children (Rosenthal & Feldman, 1999). Parents report embarrassment or anxiety in talking about sex, particularly during their children’s later adolescence (age 14-18), when many young people are engaging in sexual behavior (Jerman & Constantine, 2010). Essentially, parents struggle with their own lack of knowledge, perceived self-efficacy as communicators, situational constraints, and what information they should disclose to their children (Jaccard et al., 2002; Jerman & Constantine, 2010; Jordan, Price, & Fitzgerald, 2000).

**Challenges About What to Say**

In a recent statewide study on families with adolescent children, Jerman and Constantine (2010) found that the majority of parents in California reported having difficulty in talking with their child about specific topics related to sexuality and sex. In the open-ended question, “What is the most difficult part for you in talking to your child about sex and relationships?” (p. 1167) parents most commonly reported difficulties related to embarrassment or anxiety, lack of knowledge, age/development issues, general communication problems, and conversations about specific topics (e.g., masturbation, safe sex practices). In this same study parents and adolescents were asked if they had discussed any of the following sex topics: human reproduction, issues in becoming sexual active, the advantages of young people avoiding sexual behavior, HIV/AIDS or STIs, importance of using protection, and where to get condoms (Jerman & Constantine, 2010). Results showed that 15 percent did not discuss any of the topics and only 26 percent discussed all six topics. Among those who discussed only some topics, human
reproduction, HIV/AIDS or STIs, and avoiding sexual intercourse were the most commonly reported. Importance of using protection, where to get condoms, and issues in becoming sexually active were the least discussed by parents. In another study, Raffaelli and Green (2003) also found that parents seemed to avoid direct discussions about using birth control because it would require more knowledge about sexual behavior and parents feared it may lead to personal disclosure of their own past experiences.

**Challenges About When to Communicate**

In addition to struggling with content, or what to say, parents also report uncertainty about the appropriate times to discuss sexual attitudes and behaviors with their children (Beckett et al., 2010; Geasler, Dannison, & Edlund, 1995). Beckett et al. (2010) conducted the first detailed description of what parents and adolescents discuss when they talk about sex and what topics coincide with adolescents’ age. They found parents and adolescents were fairly consistent on what topics were discussed during adolescent development. For example, during early adolescence (age 10-13) parents commonly talked about puberty and reproduction; during middle adolescence (age 14-16), parents focused more on STIs, pregnancy, and birth control. In later adolescence (age 17-19) or when parents start to think their child may be engaging in sexual intercourse, parents continue to talk about pregnancy, STIs, and go into more detail on how to use condoms and birth control. One important finding in Beckett et al.’s study is that parents tend to keep the sex talk more vague in early adolescence, only becoming more specific when they think their child is sexually active. In other words, many adolescents are not communicating with their parents about key topics (e.g., how to use a condom, or what consent means) until after their sexual debut (Beckett et al., 2010).
Beckett et al.’s research added to the understanding of content and timing within the parent-child sex talk, but adolescents were simply asked to check a list of sex-related topics. Thus, little is still unknown about adolescents’ perceptions of the conversations they have with parents. The current study addresses this gap by further examining adolescents’ view of the actual conversations they recall having with their parents, their evaluations of those conversations, and any insight into what they wish their parents would have talked about.

**Summary**

Past research on parent-child communication about sex provides valuable information about the challenges associated with talking to their adolescent children, such as, lack of knowledge, embarrassment, breadth and depth of topics, and appropriate timing. Although this research is useful in understanding the difficulties parents face in discussing sex-related topics with adolescents, it also highlights the need to understand adolescents’ perceptions of conversations with parents because it may provide information about what adolescents view as effective, competent, and helpful in reducing risk. This may, in turn, provide information to inform and empower parents to engage in positive parent-child communication that reduces adolescents’ sexual risk-taking. Thus, the following section establishes the need for the adolescents’ point of view and how understanding what parents say, as well as how adolescents perceive what they say as effective and competent may play a vital role in future interventions that help parents overcome these challenges.
Adolescents’ Perceptions of What Parents Say

In their review of research at the onset of the 21st century, Miller-Day et al. (2013) found that research on children younger than 18 accounted for less than four percent of all research in the field of Communication over the past decade. Yingling and Socha (2000) have argued that the lack of comprehensive research on children and adolescents not only impedes current issues facing young people, but also makes it difficult to examine how adolescents “figure into communication theorizing, research, and education” (p. 7). Not surprisingly, research on parent-child communication about sex is lacking even though research has established that adolescents are developmentally capable of discussing and evaluating topics of sexual behaviors and attitudes, similar to adults (Moshman, 2011a; Smetana, 2010).

Not only are adolescents’ perspectives missing, they are crucial for understanding what sexual information helps adolescents make sense of sexual risk-taking and permissive sexual attitudes. Decades of research in developmental psychology suggest adolescents show levels of knowledge and reasoning rarely seen in children before age eleven. This includes perspective-taking and psychological functioning, along with moral, rational, and dialectical reasoning (Moshman, 1993, 2005, 2008, 2011a; Moshman & Frank, 1986). Research also shows adolescence (age 13-18) may be the most appropriate time to have discussions about sex and sexual behavior because adolescents are developmentally ready to receive and evaluate sexual knowledge (Moshman, 2011a, 2011b; Smetana, 2010).

Numerous scholars also argue that adolescents are developmentally ready to evaluate their parents’ competence and communication (Moshman, 2011a, 2011b;
Smetana, 2010), and thus, may provide insight into what types of discussions are effective/ineffective in relation to adolescents’ risky sexual behaviors or attitudes. Yet, as argued throughout this dissertation, few studies have examined the content of parent-adolescent communication about sex (cf., Afifi et al., 2008; Jerman & Constantine, 2010; Lefkowitz & Stoppa, 2006) and how adolescents’ perceptions about the effectiveness of these conversations relate to their attitudes and behaviors (cf., Beckett et al., 2010; Feldman & Rosenthal, 2000). Therefore, the current dissertation addresses this gap by examining the content of what parents actually say (i.e., actual conversations), what adolescents wish their parents would say/would have said (i.e., ideal conversations), how adolescents evaluate their parents’ communication competence and effectiveness, and how these evaluations relate to adolescents’ sexual risk taking and/or attitudes.

**Content of Parent-Child Communication About Sex**

A great deal of research supports the importance of looking at communication content in understanding individual and family outcomes. Koenig Kellas (2005), for example, described family stories as windows into family culture (see also Koenig Kellas & Trees, 2013) and found families who told family identity stories that included content surrounding themes of stress were much less satisfied than families whose themes in the story revolved around accomplishment. Similarly, in a study focused on real and ideal family stories, Vangelisti et al. (1999) argued that, “the standards people use to evaluate their family relationships become apparent when stories people tell about their family are compared with those they feel reflect ‘ideal’ family relationships” (p. 338). Through their comparison of real and ideal family stories, Vangelisti et al. (1999) found that individuals who told family real stories containing content about themes such as adaptability,
togetherness, care, humor, or reconstruction were much more satisfied with their families than individuals whose story content contained themes of hostility, chaos, personality attribution, or divergent values.

With regard to adolescent communication and attempts to reduce adolescent risk, Hecht, Miller-Day and colleagues (2007) examined the content of adolescents’ narratives about times they successfully and unsuccessfully resisted drugs/alcohol and from this analysis identified prototypical strategies adolescents use to effectively offer as well as resist drug offers (Alberts, Miller-Rassulo, Hecht, 1991). They then created preventive interventions to teach adolescents resistance skills when being pressured into drug/alcohol use (Alberts et al., 1991; Hecht, 2004; Hecht, Graham, & Elek, 2006; Hecht & Miller-Day, 2007). Focusing on adolescents’ perspectives on the content of reported speech was instrumental in designing effective intervention programs to help reduce adolescent risk. Together, research on family stories and risky behavior suggests that eliciting and analyzing the content of communication is important to understanding links between communication and well-being.

The current study examines the content of what adolescents report their parents say to them in conversations about sex in order to understand what adolescents recall as memorable and how they evaluate the things their parents say. Similar to Vangelisti et al. (1999), the current study also examines what adolescents want to hear from their parents (i.e., ideal conversations) about sex, in order to further understand potential discrepancies between what parents actually say and adolescents’ perceptions on how they could improve. To address these issues, the following research questions are posed:
RQ2: What types of actual conversations do adolescents report having with their parents about sex?

RQ3: What types of conversations do adolescents report as ideal (i.e., wishing they had with their parent(s) about sex)?

In addition, adolescents’ reports of what their parents say (e.g., actual conversations) may vary in the effect the conversation content has on adolescents’ risky sexual behavior and permissive attitudes. For example, adolescents who report their parents discussing details about sexual safety and/or sexual consequences may be better prepared when faced with sexual decision making than those parents who provide vague or indifferent information. In order to examine the variation of type in conversation on adolescents’ sexual risk taking and permissive sexual attitudes the present study poses the following hypothesis:

H5: Adolescents’ reports of type of conversations will predict differences in adolescents’ perceived self-report of (a) sexual risk-taking and (b) permissive sexual attitudes.

In addition to investigating adolescents’ actual and ideal conversations independently, another intention of this present study was to understand the patterns and/or commonalities that emerge between the adolescents’ actual and ideal conversations. Examining the qualitative patterns between actual and ideal conversations may provide insight into what types of conversations adolescents perceive as sufficient, as well as what they would add or change about an actual conversations to make it more ideal. Patterns between actual and ideal refers to any discernable commonalities between the types of conversations adolescents report having with their parents and the types of
conversations they wish they had had. For example, adolescents who report actual conversations with their parents pertaining to abstinence may also be more likely to describe their ideal conversations as including more details about sexual safety or the pros and cons of having sex. Indeed, some adolescents may have no suggestions for the actual conversation because the discussion helped them make sense of sex and they perceived it as ideal. Knowing which actual types of conversations correspond with no suggested changes (i.e., are seen as ideal) would offer information into the types of conversations adolescents value. Thus, understanding what, if any, qualitative patterns exist between adolescents’ perceived actual and ideal conversations may provide a more holistic interpretation of adolescents lived experiences surrounding conversations about sex that may not be fully captured or synthesized based on interpreting the actual and ideal themes separately. In order to further investigate the qualitative patterns and intricacies of meaning between adolescents’ reports of actual and ideal conversations the current study also poses the following research question:

RQ4: Are there identifiable patterns between actual and ideal parent-child conversation types?

Perceptions of Parents’ Competence and Effectiveness

Although understanding the content provides important information about parent-adolescent conversations about sex, research shows that understanding how the family member perceives the content is just as important as the content itself (Sillars, Roberts, Dun, & Leonard, 2001; Sillars, Smith, & Koener, 2010). Importantly, children and parents may differ in their perceptions of conversational effectiveness. Research on family conflict, for example, found that parent-child dyads commonly misunderstood
each other because they were focused on individualistic goals (e.g., justifying their point of view) and not on taking the other’s perspective on topics being discussed (Sillars et al., 2005). Misperceptions, resulting in individualistic goals, or differences in perspectives (Sillars, 1998) could also create misunderstanding during parent-adolescent conversations about sexual behavior.

In one of the few studies that focused on both adolescents’ and parents’ evaluation of parents as “sex educators,” Feldman and Rosenthal (2000) found parents and adolescents tend to evaluate a successful sex talk very differently. Notably, parents tended to evaluate the conversation based on their own motivation to engage and show concern for their child. In contrast, adolescents based their evaluation on the parents’ communication behaviors during the conversation, rather than the parents’ intentions. For example, adolescents evaluated their mothers as good sex educators when they took the adolescents’ needs into account and created a comfortable communication environment. In other words, no matter how well intended the parent is in their messages about sex, it is clear that the adolescents’ perception of how parents communicate and conduct themselves during the conversations matters. The following section, therefore, reviews research on communication competence and effectiveness as a possible lens through which to understand adolescents’ perspectives on parents’ conversational content and its effectiveness.

**Communication Competence and Effectiveness in Conversations About Sex**

According to Spitzberg and Cupach (2002), “Interpersonal skills are the means through which individuals negotiate everyday social interactions. If a person’s interpersonal skills are deficient, then his or her social relations are likely to be less
effective and more negatively reinforced” (p. 564). Interpersonal skills are often positioned within the framework of communication competence and effectiveness. Investigating adolescents’ perceptions of parents’ communication competence (i.e., ability to communicate ideas appropriately) and effectiveness (i.e., how helpful the conversation was) during a conversation about sex may relate to adolescent’s sexual attitudes and behavior.

According to Spitzberg and Cupach (1984, 2002), communication competence is an essential human need required to accomplish interpersonal goals and achieve physical and psychological satisfaction. Communication competence is often defined as the degree to which a person is able to communicate successfully and appropriately in a given context (Spitzberg, 1983; Spitzberg & Cupach, 1984, 1989). Communication competence also includes the ability to adapt, be responsive, and manage awareness of self and others during interpersonal interaction over time (Spitzberg & Cupach, 1984, 2002).

Although similar to competence, communication effectiveness is characterized by how helpful a conversation is at explaining information and/or thoughts (Canary & Spitzberg, 1987). Communication effectiveness is often characterized as a process that involves articulating information that is easily understood by the other individuals who are receiving the information (Canary & Spitzberg, 2002). Taken together, communication competence and effectiveness capture an individual’s appropriateness and usefulness during a conversation, thus both are examined in the present study.

Some scholars have also added that communication competence and effectiveness are a person’s assessment of his/her own and/or others’ ability to communicate in ways that generate effective interactions including certain levels of appropriateness, social skill,
flexibility, adaptability and patience (Afifi & Schrodt, 2003; Canary & Spitzberg, 1987; Guerrero, 1994; Spitzberg & Cupach, 2002). In other words, communication competence and effectiveness are not only dependent on the behaviors of an individual but also on the behaviors and perceptions of others. Moreover, what constitutes appropriate and effective communication in one context or one personal relationship may be ineffective in another (Spitzberg, 1983).

In the context of parent-child communication about sex, an adolescent’s perception of the parent’s effectiveness and/or communication competence may play a role in determining an adolescent’s willingness to listen or talk about sexual behaviors and attitudes. In other words, the more a child perceives that his/her parent is competent in communicating about sex, the more likely the child might be willing to listen. Moreover, the more effective, or helpful, adolescents perceive what their parents have to say, the more likely they may be to heed the advice of their parent(s). Despite this possibility, the research on parent-child sex talks has tended to focus on the parents’ perceptions of their own (in)competence and the effect of this insecurity on preventing them from talking to their children about sex-related topics. For example, parents often worry they will not handle the situation appropriately (Rosenthal & Feldman, 1999), lack necessary communication skills or adequate knowledge about sex themselves, or will misinform their adolescents about sexual practices or facts (DeLorio et al., 2003; Leftkowitz & Stoppa, 2006). This, in turn, means many parents avoid the sex talk altogether based on their perceived incompetence surrounding sex-related topics.

To date, few studies have examined adolescents’ perceptions of parental competence in communication about sex or other uncomfortable or “taboo” topics. As an
exception, Thorne, McLean, and Dachbach (2004) found that adolescents were more open to talk about marijuana when they perceived their parent as honest, straightforward, and competent on the topic. In the context of parent-adolescent communication about sex, Feldman and Rosenthal (2000) conducted a study in which adolescents evaluated parents as “sex educators” and found that adolescents perceived their mothers as competent sex educators when mothers communicated openly, made an effort to make them feel comfortable, and allowed adolescents to ask questions. In another study, Afifi et al. (2008), found that adolescents’ perceptions of how their parents communicated about sex, rather parents’ own perceptions, were a better predictor of adolescents’ attitude and behavior regarding talking about sex. In particular, “adolescents’ perception of their parents’ lack of communication competence was associated with adolescents’ self-reported anxiety, which predicted adolescents’ avoidance during their discussions about sex” with their parents (p. 715). Finally, Akers, Holland, and Bost (2011) found in their synthesis of studies on parental communication about sex that “communication skills are important, and researchers have suggested that parents be taught certain general communication skills such as how to talk less, listen more, be less directive, ask more questions of their adolescent, and behave in a nonjudgmental fashion” (p. 507).

Collectively, these findings suggest that perceptions of competence and effectiveness may facilitate and/or limit current or future communication about sex. More research needs to examine effectiveness and competence in sex conversations, especially since parents often question their own competence and seem to struggle with talking to their children about sex (DeLorio et al., 2003; Leftkowitz & Stoppa, 2006). Parents face struggles as they consider talking with their children about sex-related topics. In addition,
the research also highlights the gap in understanding the adolescents’ reports of what parents say (e.g., content) and what they perceive as helpful and appropriate (e.g., communication effectiveness and competence) about the content. In order to make parent-adolescent conversations about sex less threatening, more informative, and more effective in reducing risk, there need to be scripts and/or guidelines for how parental communication about sex positively relates to adolescent sexual health and behavior. Developing such scripts depends, in part, on adolescents positive appraisal of those messages.

Therefore, adolescents’ perceptions may be critical to the development of interventions that educate parents on message content and communication strategies that help adolescents make sense of sexual behavior and view their parents as a dependable source of sexual knowledge. In order to better understand adolescents’ perceptions, the current dissertation proposes the following hypothesis to examine adolescents’ reports of what their parents say (e.g., actual conversations) in relation to what conversations are perceived as effective and competent:

H6: Conversational content (i.e., types) will predict differences in the degree to which adolescents perceive their parents’ communication about sex as (a) effective and (b) communicatively competent.

In addition to understanding message content and its relation to adolescents’ perceptions of effectiveness and communication competence, scholars argue that to understand specific family dynamics and/or topics discussed within families it is critical to examine them within the larger family discursive culture (Fitzpatrick & Ritchie, 1994, 1997; Koerner & Schrodt, 2014; Ritchie & Fitzpatrick, 1990). Because it is within the
family context that adolescents learn not only how to communicate, but also how to 
perceive communication, the discursive culture within the family has important bearing 
on adolescents’ perceptions of the sex talk, as well as perceived communication 
effectiveness and competence within those conversations. The next section, therefore, 
positions family culture, parent-child socialization, and family communication patterns as 
important frameworks to fully understanding adolescents’ experiences of parent-child 
communication about sex.

**Family Communication Culture**

Family is the fundamental socializing ground for communication behavior and 
perceptions about communication (Galvin, 2003). It is primarily within families where 
children learn ideas, values, and behaviors about their world, and socialization takes 
place through communication (Galvin, 2003). Socialization is a complex process that 
provides individuals with social knowledge that guides their decisions and actions 
(Medved, Brogan, McClanahan, Morris, & Shepherd, 2006). Moreover, socialization is 
not a one-time occurrence, but commonly occurs through exposure to messages and 
behaviors during numerous interactions with people over the course of time. Although 
socialization occurs within peer groups, schools, and via mass media, one of the most 
powerful influential forces in creating and shaping adolescents’ views is the family 
(Galvin, 2003). Bronfenbrenner (1979) argued that,

> Family plays a pivotal role in socialization, as an intermediary between the 
individual and wider cultural context. The family provides the earliest physical 
and relational settings in which the child learns to grasp the wider universe of 
objects and events, and the complexities of human emotion and behavior. (p. 2)
In terms of sexual socialization, this usually begins at home where parents have the opportunity to stress their values and ideas about sexuality, nudity, physical affection, and sexual behavior (L’Engle & Jackson, 2008; Shtarkshall et al., 2007). Specific to the current study, “sexual socialization is the process through which young people learn and internalize sexual knowledge, attitudes, skills, norms, and expectations for sexual relationships” (L’Engle & Jackson, 2008, p. 355). In addition, adolescents gain a set of ideas, values, and beliefs about how to behave and communicate in relational and sexual contexts that shapes their approaches to sexual behavior and/or sexual risk (Shtarkshall et al., 2007). As previously discussed in the section on sources of sexual knowledge, parents traditionally promote sexual health, whereas, peers and media often provide information that encourages adolescents’ risky sexual behavior (L’Engle, Brown, & Kenneavy, 2006). As such, adolescents’ perceptions of the general family discursive culture may provide further insight into sexual socialization within the family.

Koerner and Schrod (2014) argued that, “because humans ‘do’ families primarily through social interaction, theories of family communication have the potential to greatly contribute to our understanding of humans, their social behaviors, and society as a whole” (p. 2). Family interactions are characterized by fairly stable patterns, and one of the most useful theoretical frameworks for conceptualizing such communication, and therefore the communication climate in which parents and adolescents communicate, is family communication patterns theory (Koerner & Fitzpatrick, 2002a, 2002b). FCP theory provides a unique lens to examine the larger family culture and psychosocial processes associated with adolescents’ sexual socialization, including those already reviewed in previous research and this dissertation, such as relational factors (e.g., closeness) and
verbal communication (e.g., content, frequency). Capturing adolescents’ reports of actual and ideal conversations, as well as perceptions of parents’ effectiveness during those conversations helps address some of the gap in the literature on adolescents’ views. However, understanding how adolescents’ perceptions of those conversations fit into the family communication patterns is critical to understanding the (in)effectiveness of parent-child communication about sex in different family cultures. More specifically, family communication patterns likely help explain adolescents’ sexual attitudes and behaviors, particularly as they intersect with adolescents’ exposure to different types of parent-child sex communication and their perceptions of that communication. FCP may, for example, moderate the relationships between the types of conversations adolescents recall and how competent and effective they perceive their parents to be because certain communication climates position certain types of communication as more or less appropriate. Finally, FCP should interact with the other variables discussed in this dissertation to help explain adolescents’ sexual risks and attitudes because altogether the variables capture a more comprehensive adolescent experience. Therefore, in the following section FCP theory is reviewed and an argument is provided for why understanding the larger family discursive culture is important to capture the adolescents’ experience surrounding sex-related parent-child communication.

**Family Communication Patterns**

FCP theory is the outcome of more than 40 years of research by scholars in both mass communication and family communication (see Koerner & Schrodt, 2014 for detailed history). The original framework of FCP, developed by mass communication scholars McLeod and Chaffee (1972, 1973), was established to understand how families
develop and share similar social realities. They were interested in examining how parents socialize their children to use and process information they are exposed to through mass media messages. McLeod and Chafee (1973) identified consistent and predictable ways by which family members process messages from the media by adapting and communicating with each other about the information. According to their research, through these consistent and predictable patterns of communication family members create and achieve agreement about social reality in two distinct ways: concept-orientation and socio-orientation. Concept-orientation occurs when family members discuss or debate ideas to arrive at a shared agreement. Socio-orientation occurs when family members conform to the ideas and values held by other family members. Based on these two dimensions, McLeod & Chaffee (1973) realized that the processes families use to create a shared social reality influence the communicative behaviors and practices within the family and developed a measure to evaluate how parents socialize their children to process information from mass media messages.

Since its original development, family communication scholars have revised the family communication patterns instrument in order to shift focus away from mediated messages and toward communication within the family (Fitzpatrick & Ritchie, 1994, 1997; Ritchie & Fitzpatrick, 1990). In the revised format concept-orientation was conceptualized as *conversation orientation* and socio-orientation as *conformity orientation* to reflect the ongoing and dynamic nature of family interactions (Ritchie & Fitzpatrick, 1990). Conversation orientation describes “the degree to which families create a climate in which all family members are encouraged to participate in unrestrained interactions about a wide array of topics” (Koerner & Fitzpatrick, 2002b, p.
85). Families that are high in conversation orientation interact freely with other family members as they share ideas, concerns, and make decisions, whereas families low in conversation orientation interact with family members less frequently and with hesitation. On the other hand, conformity orientation refers to “the degree to which family communication stresses a climate of homogeneity of attitudes, values, and beliefs” (Koerner & Fitzpatrick, 2002b, p. 85). Families that are high in conformity orientation often have a hierarchical family structure that emphasizes uniformity of values, child obedience, and conflict-avoidance. In contrast, families low in conformity orientation value the equality of all family members, respect individual values and opinions, and encourage personal growth. Interactions in these families commonly emphasize the independence and equality of family members, including children.

The effects of conversation and conformity orientations are often dependent on each other. For example, Koerner and Schrodt (2014) argued that,

Rather than having two simple main effects that are additive, these two dimensions often interact with one another such that the impact of conversation orientation on family outcomes is moderated by the degree of conformity orientation of the family, and vice versa (p. 7).

Thus, the dimensions of conformity orientation and conversation orientation are theoretically orthogonal and may interact to produce four family types – *consensual* (i.e., high conversation and conformity), *laissez-faire* families (i.e., low conversation and conformity), *pluralistic* (i.e., high conversation, low conformity), *protective* (i.e., low conversation, high conformity; Koerner & Fitzpatrick, 2002b; Koerner & Fitzpatrick, 2006).
Based on the interactions of the two dimensions, consensual families are open to discussing ideas and expressing opinions, but are expected to ultimately agree with the opinions of those in authority positions such as parents. In contrast, laissez-faire families are characterized by low engagement with each other and often rely on external influences (e.g., peers, media) for much of their information over family members. In pluralistic families open discussion of thoughts and ideas are encouraged with little pressure to conform to other family members’ perspectives. Last, protective families stress obedience and compliance with family norms and expectations, allowing little opportunity for disagreement or alternative ways of thinking. Research has shown these family types to be distinct on a number of family communication processes including conflict resolution (Koerner & Fitzpatrick, 1994, 2002b), confirmation and affection (Schrodt et al., 2007), and parent-adolescent understanding (Sillars et al., 2005). The interactions of these dimensions also help explain the means by which families construct their own experiences (Rueter & Koerner, 2008) and may further explain the larger discursive family culture association with adolescents’ perceptions of sexual risk.

Although these four family types explain unique family communication environments, many scholars have moved from looking at discrete family typologies (i.e., consensual, laissez-faire, pluralistic, and protective) in favor of continuous FCP dimensions (i.e., conversation and conformity orientations) as the typologies commonly create interpretation problems and less sophisticated analyses (Koerner & Fitzpatrick, 2002a). Thus, the following section highlights research on the continuous FCP dimensions of conversation and conformity orientation and how they link to adolescents risk.

**Family Communication Patterns and Adolescent Risk**
Previous research has established that a “healthy” family communication climate is an important indicator of whether an adolescent will engage in risk behavior (Koesten, Miller, & Hummert, 2002; Miller-Day, 2008). For example, research suggests that the FCP dimensions (i.e., conversation and conformity orientation) may be connected to individuals general risk behavior during adolescence (i.e., substance abuse, sexual activity, Koesten, Miller, Hummert, 2002), along with parent-child communication about risk surrounding substance use (Koesten & Anderson, 2004; Miller-Day, 2008) and sexual behavior (Allen, 2010; Koesten & Anderson, 2004; Lehr, DiIorio, Dudley, & Lipana, 2000).

In their in-depth interview study of 25 young women, for example, Koesten and colleagues (2002) found that participants reported engaging in very few risk behaviors during their adolescent years when they came from a family that encourages open communication and expressions of diverse opinions. In contrast, participants that described coming from families where parents set firm rules and discouraged children from negotiating and openly discussing their opinions or ideas commonly reported engaging in multiple (i.e., four or more) high-risk behaviors during adolescence. These findings may suggest that adolescents who grew up in families with high conformity and low conversation had little opportunity to seek help from their parents when they found themselves in risky situations and had to manage difficult situations on their own. It may also be that children from high conformity and low conversation orientation families rebel against family norms and values in adolescence by engaging in risky behaviors.

In addition, a study on adolescent drug use found that adolescents were less likely to report using drugs when they came from families that openly express their own values
and opinions, as well as openly share information about drug use (Brody et al., 2004). Moreover, in a study on adolescents’ views of parental strategies to deter substance abuse, Miller-Day (2008) found that adolescents who came from families where parents established clear rules (high conformity), as well as created an open environment to express opinions (high conversation) had lower drug use in late adolescence. Unlike Miller-Day, Koesten and Anderson (2004) found that individuals who reported their family high on conformity orientation also reported higher risk in the form of trying cigarettes at a younger age than individuals low in conformity. Koesten and Anderson (2004) did find, however, that young adults who grow up in high conversation orientation families have a broader range of interpersonal skills and report more communication competence in dealing with risk behaviors (e.g., resisting drugs).

In terms of sexual risk, many scholars have argued that further examination of the larger family communication climate is vital to understanding parent-child sexual communication effectiveness on adolescents’ sexual attitudes and behaviors. For example, Lefkowitz (2002) states that, “parent-child communication about sex-related topics needs to be understood within the context of general communication patterns” (p. 50). Similarly, in Hutchinson’s (2002) study on mother-daughter communication about sex, she argues, “By far, the single greatest predictor of parent-adolescent sexual communication was the quality of parent-adolescent general communication” (p. 243). Moreover, in a meta-analysis of father-child sexual communication, Wright (2009) concluded that the extent to which fathers communicated with their children about nonsexual topics positively correlated with father-child sexual communication. Collectively, these scholars conclude
that research needs to take family communication patterns into account when trying to understand adolescents’ perceptions surrounding attitudes and behaviors about sex.

The few studies that have examined the association between general family communication climate and sexual risk have produced mixed results. For example, Lehr et al. (2000) found that higher conversation orientation led to more information and value sharing about sex-related topics between fathers and sons. Koesten and Anderson (2004) also found that an individual’s self reports of his or her family’s high conversation and high conformity orientation “were significant predictors of whether an individual reported they had talked to an adult about AIDS, thus reducing risk behaviors in some way” (p. 116). Allen (2010) found that individuals who reported higher conversation orientation in their families were more likely to engage in discussions about sexual risk with their parents compared to individuals who reported low conversation orientation.

Conversely, Bynum (2007) found no significant association between general family communication and adolescents sexual risk. She proposed that a moderating framework whereby FCPs (conversation and conformity orientation) moderate the relationship between parent-adolescent sex talk and adolescent sexual attitude and behaviors be further investigated. Bynum argued that the link between conversations about sex and adolescents’ sexual attitudes and behaviors about risk may depend on the family environment. Building on Bynum suggestion, the current dissertation further investigates the association between conversation and conformity orientations and adolescents’ perspectives on parent-child communication about sex.

**Family Communication Patterns and Adolescents’ Perceptions of Parental Conversations about Sex**
Many scholars who study FCP and risk suggest that future research should focus on a younger age sample (e.g., high school adolescents) because younger samples most often live at home and interact with their families on a daily basis, which may provide more insight into the link between family climate and actual conversations (Allen, 2010; Koesten & Anderson, 2004; Koesten, et al., 2002). FCP may play a central role in what types of conversations parents have with their adolescent during the high school years, as well as whether adolescents’ perceive these conversations as effective in reducing their risk behavior. Little research has examined FCPs with regard to parent-child communication about sex. Moreover, few studies have investigated the content of what parents actually say to their adolescent children during the sex talk. The current dissertation examines both, suggesting that certain FCPs are more likely to result in certain types of sex talk. For example, one might expect that families high in conformity orientation and low in conversation orientation may be more likely to have little communication on the topic of sex or to have conversations that center around less permissive attitudes such as abstinence. Since little research has addressed how conversation and conformity orientation relates to adolescents’ report of actual conversations about sex-related topics, the following research question is proposed to examine these potential relationships:

RQ5: Does an adolescent’s self-reported (a) conversation orientation and (b) conformity orientation predict type of actual conversation they report having with their parents?

Second, examining adolescents’ perceptions of what their parents say to them about sex, as well as the effectiveness and competence of these messages within the
larger family discursive culture may provide a more complete picture of the sex talk experience during adolescence. Based on the findings of conversation and conformity orientation in relation to adolescents’ sexual attitude and behaviors in previous research, conformity and conversation orientation are related to willingness of parent and child to discuss sex-related topics, thus potentially reducing adolescents’ attitude and behavior surrounding sexual risk (Koesten and Anderson (2004). However, it is still unclear how perceptions of competence and effectiveness may differ depending on adolescents’ perception of their family communication patterns. In other words, the link between parent-adolescent conversation types and adolescents’ attitudes and behavior towards sex may depend on the larger family communication climate (e.g., FCP). Family communication climate may help explain types of conversations adolescents perceive as most competent and effective. For example, adolescents from high conversation orientation families are more likely to view open, honest, and detailed conversations about sex as helpful while adolescents who come from low conversation families where open and detailed conversations are not the norm, thus view that type of conversation as abnormal or inappropriate. Moreover, adolescents who come from families that respect all family members opinions and values (i.e., low conformity orientation) are more likely to view different perspectives or conflict as beneficial than adolescents who come from families that stress uniform values and child obedience (i.e., high conformity orientation) where children are expected to do as a parent says without question. Little is still known about how FCP (e.g., conversation and conformity orientation) moderates the relationships between actual conversations about sex and adolescents’ perception of the
conversation being competence and effective, thus the following research questions are proposed:

RQ6: Does conformity orientation moderate the relationship between actual conversations adolescents report having with their parents and adolescents’ perceived (a) effectiveness and (b) communication competence?

RQ7: Does conversation orientation moderate the relationship between type of actual conversation adolescents report having with their parents and adolescents’ perceived (a) effectiveness and (b) communication competence?

Overall, to understand adolescents’ viewpoints of what conversations are most effective and competent, the parent-adolescent sex talk need to be understood within the larger family communication climate. To develop interventions to assist parents from diverse family contexts, research needs to evaluate more than just the conversations about sex, but how those conversation fit within the complex factors that relate to adolescents’ sexual attitudes and behaviors.

Third, and finally, based on the combination of the research mentioned above, to understand adolescents’ perceptions and experiences surrounding the parent-adolescent sex talk, it is imperative to investigate how the individual, relational, and FCP factors fit together. Every family is different and approaches difficult or taboo conversations, such as the sex talk in diverse ways. Some families’ communication culture is more conducive to positive parent-child sex talk. Particular families may be more equipped or prepared to talk about specific sex-related topics than others. Nonetheless, most parents still struggle with what to say and how to say it within their own unique family culture (Jerman & Constantine, 2010). As previously mentioned, considerable research has
suggested that parent-child closeness and frequency of conversations about sex-related topics play a role in reducing adolescents’ risky sexual attitudes and behaviors (e.g., Guilamo-Ramos et al., 2012; Miller, 2002; Miller et al., 2001). In addition, the larger family communication climate may play an important role in adolescents’ perceptions of parents’ actual conversations, the effectiveness and competence of the message, and whether adolescents engage in risky behavior (Koesten et al., 2002; Miller-Day, 2008). In order to gain a holistic insight into adolescents’ perceptions of parent-adolescent sex talk experiences and how relational, communicative, and family factors may work together to shape adolescents’ sexual attitudes and behaviors, the following hypothesis was posed:

H7: Factors associated with communication in the family, including frequency, closeness, perception of effectiveness, and perception of competence, conformity orientation, and conversation orientation will predict adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes.

Chapter Summary

In sum, the purpose of this current dissertation is to investigate adolescents’ perceptions of what their parents say about sex, what type of messages adolescents perceive as effective and competent, and how those parental messages are associated with sexual risk attitudes and behavior. Moreover, the study also sets out to evaluate how those perceptions are entrenched in the adolescents’ experiences of the larger family dynamics and communication climate. Assessment of the proposed hypotheses and research questions supports the goals of better comprehending the parent-adolescent sex talk from an adolescent viewpoint. All previously stated hypotheses and research questions are summarized in Table 1.
Table 1

*Summary of Current Dissertation’s Hypotheses and Research Questions*

| H1: | Frequency of parent-adolescent communication about sex will be negatively related to adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes. |
| H2: | Frequency of peer-adolescent communication about sex will be positively related to adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes. |
| H3: | Frequency of parent-adolescent communication about sex will decrease the association between the frequency of peer communication and adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes. |
| H4: | Parent-adolescent relational *closeness* will be negatively related to adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes. |
| RQ1: | Does adolescent sex predict differences in the parent (e.g., mother, father, both) adolescents report talking to about sex-related topics? |
| RQ2: | What types of actual conversations do adolescents report having with their parents about sex? |
| RQ3: | What types of conversations do adolescents report as ideal (i.e., wishing they had with their parent(s) about sex)? |
| H5: | Adolescents’ reports of type of conversations will predict differences in adolescents’ perceived self-report of (a) sexual risk-taking and (b) permissive sexual attitudes. |
| RQ4: | Are there identifiable patterns between actual and ideal parent-child conversation types? |
| H6: | Conversational content (i.e., types) will predict differences in the degree to which adolescents perceive their parents’ communication about sex as (a) effective and (b) communicatively competent. |
| RQ5: | Does an adolescent’s self-reported (a) conversation orientation and (b) conformity orientation predict type of actual conversation they report having with their parents? |
| RQ6: | Does conformity orientation moderate the relationship between actual conversations adolescents report having with their parents and adolescents’ perceived (a) effectiveness and (b) communication competence? |
| RQ7: | Does conversation orientation moderate the relationship between type of actual conversation adolescents report having with their parents and adolescents’ perceived (a) effectiveness and (b) communication competence? |
| H7: | Factors associated with communication in the family, including frequency, closeness, perception of effectiveness, and perception of competence, conformity orientation, and conversation orientation will predict adolescents’ self-reports of (a) sexual risk-taking and (b) permissive sexual attitudes. |
CHAPTER TWO

METHODS

In order to develop future parent-based interventions and inform parents on effective communication strategies in talking about sexual behavior and attitudes, the present dissertation study examined adolescents’ perceptions of parent-adolescent communication about sex. In particular, I examined what adolescents report their parents say about sex, what they wished they had said, what types of messages adolescents perceive as effective and competent, and how those parental messages, as well as the larger family environment relates to sexual risk. The current chapter explains the methodology employed to test the research questions and hypotheses, including a description of recruitment, participants, procedures, and measures.

Recruitment

The current dissertation study focused on adolescents’ perceptions of parent-adolescent communication about sex-related topics by examining 16-18 year-old adolescents attending high school. Research indicates adolescence is a common time for parents to talk to their children about sex and sexuality (Beckett et al., 2010; Crockett et al., 2003) and sex-related communication is highly relevant to this age group given that a majority of adolescents become sexuality active between the ages of 16-19 (Guttmacher Institute, 2012; Wellings et al., 2000). After receiving Institutional Review Board (IRB) approval, recruitment of participants in this age group took place in two ways, including in high schools and through social networking. Each is explained in the following section.
High School Recruitment

School recruitment. Primary recruiting efforts occurred at high schools within the Midwest. The primary investigator employed convenience sampling, specifically targeting local area high schools in Nebraska and a high school in Minnesota where the primary investigator had established previous contacts.

The primary investigator contacted six school districts in Nebraska and Minnesota to provide information about the study. Two of the six, Lincoln Public Schools (LPS) and Lake Park-Audubon, approved recruitment. The LPS district is located in Lincoln, an urban Nebraska city (population 265,400). It consists of six high schools (grades 9-12, total enrollment around 12,000), and is the second most ethnically diverse school district in Nebraska. The Lake Park-Audubon school district is located in a rural Minnesota town (population 1,500) and consists of one high school (grades 9-12, total enrollment around 250). Although these school districts were different based on population and diversity in general they were both located in fairly conservative communities in the Midwest. After receiving approval, each superintendent provided principal contact information for each of the seven schools.

The primary investigator then contacted the principals via email and phone to set up a meeting time to discuss the present dissertation study (see Appendix A for the school recruitment letter). Six of the seven principals responded and set up a time to meet at their designated schools. In the meetings the primary investigator discussed study details, recruitment methods, and classes that would best fit the target sample age of 16-18 years (e.g., Family Consumer Science classes, Health classes). During these meetings,

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2 School district information is at www.lps.org/about/profiles (updated, April 2013).
3 School district information is at www.lakeparkaudubon.com (updated, 2013).
all principals agreed to allow their students to be recruited for participation in the current study. Most of the principals preferred recruitment take place in Family Consumer Science classes because the dissertation topic related to the course material; however, recruitment was also approved for Social Studies, English, and Health classes. Each principal provided a list of teacher contact information for approved classrooms. The primary investigator then contacted each teacher and set up meetings to discuss study details and schedule days to recruit in approved classes. The teachers’ preferred method of providing study information and participant recruitment dictated participant recruitment and varied at each school. The preferred methods are highlighted in the following section.

**Participant recruitment.** The primary investigator visited each participating class to announce the study information at the beginning or end of each approved class period. The participant recruitment script for the oral announcement in schools is presented in Appendix B. Since participants were under the age of 18, recruiting parents to permit their adolescent to participate in the present study was important and a requirement of IRB approval. As a result, after announcing the details of the study, the primary investigator gave all students in the classroom a hard copy of the parental recruitment script (see Appendix C) and the opportunity to provide their email address to receive an electronic copy of the parental recruitment script to provide for more convenient parental access. All students were instructed that the parental recruitment script included a link to the parental consent form (see Appendix D) and that in order to participate a parent/guardian must read, electronically sign, and provide his/her child’s email address so the primary investigator could email the minor assent form (see
Appendix E) and survey to the adolescent. Once the adolescent received, read, and electronically signed the assent form they were eligible to complete the online survey.

Two of the six schools preferred to adapt the recruitment method because a majority of the student population did not have access to a computer at home for their parent/guardian to complete the online consent form. For these two schools, the primary investigator provided students the same announcement, but also provided two hardcopy versions of the parental consent forms (see Appendix F). The primary investigator instructed students that in order to participate in the study they must return one copy of the parental consent form to school within two weeks to have the option to complete the survey at school.

**Social Network Recruitment**

In addition to recruitment in schools, the primary investigator recruited participants through social network sampling. To do this, the primary investigator contacted individuals in her social media network. The primary investigator also posted on Facebook, requesting individuals pass along the parental recruitment script, which included the link to the parent consent form for any parent of an adolescent and/or adolescent between the ages of 16 to 18. The same parental recruitment script was used in both the social network and high school recruitment strategies.

**Participants**

Participants (N = 159) were high school adolescents in tenth (n = 15, 9.4%), eleventh (n = 66, 41.5%), and twelfth grade (n = 78, 49.1%). The participants ranged in age from 16-19 years (M = 16.66, SD = .65) with most participants being 16 (n = 69, 43.4%) and 17 (n =76, 47.8%) years of age and a small percent being 18 (n = 13, 8.2%)
and 19 (n = 1, .6%). The sample included 101 females (63.5%) and 58 males (36.5%) with over ninety-six percent (n = 151) reporting heterosexual orientation. Since the primary school recruitment effort took place in Nebraska and Minnesota, most participants were residents of those states (Nebraska n = 137, 86.2%; Minnesota n = 9, 5.7%). However, based on the social network sample a small percentage (n = 13, 8.1%) did report residency in ten different states (including California, Florida, Illinois, Maine, Nevada, North Dakota, Ohio, South Dakota, Utah, and Washington). Participants identified their ethnicities as Caucasian/White (n = 93, 58.5%), African American (n = 22, 13.8%), Hispanic/Latino/a (n = 18, 11.3%), Asian (n = 9, 5.7%), Middle Eastern (n = 8, 5%), Native American (n = 3, 1.9%), and six (3.8%) people identified as multiethnic (i.e., African American/White, Native American/White, Native American/Latino, Caucasian/Latino, Caucasian/Hispanic, Caucasian/Hispanic, and Spanish). Adolescents reported that their parent/guardian education level ranged from no formal schooling to completing a graduate/professional degree (see Table 2). The majority of adolescents identified as Christian (n = 110, 69.1%), while the remaining participants identified no religion (n = 27, 17%), Muslim (n = 5, 3.1%), Buddhist (n = 5, 3.1%), Jewish (n = 2, 1.3%), Hindu (n = 1, .6%), and other/combination of religions (n = 9, 5.7%). Although most participants were from the Midwest, the sample was comprised of a relatively diverse group of adolescents from different ethnic/racial, religious, and family educational backgrounds.

Eighty-one percent (n = 128) of adolescents in this study reported talking to their parents about sex. The remainder of participants indicated they have never talked to their parents (n = 18) or left the open-ended question describing their conversation blank (n =
9). Four of the open-ended responses were unreadable \((n = 4)\). Thus, in the current study, 146 participants reported on conversations they had or reported no conversation at all. Of the 128 who had talked to their parents, 59.4 percent \((n = 76)\) reported only talking to mothers, 9.4 percent \((n = 12)\) only to fathers, and 31.2 percent \((n = 40)\) reported talking to both parents. When asked if they had talked to friends, 89.3 percent \((n = 142)\) of adolescents reported talking to their friends about sex. The average age of adolescents’ first talk about sex was 13.03 years \((SD = 2.76)\) with mothers, 13.42 years \((SD = 2.21)\) with fathers, and 12.96 years \((SD = 2.24)\) with peers.

Of the 159 adolescents in the study, 57.2 percent \((n = 91)\) indicated they had engaged in sexual intercourse. The average age for adolescents’ sexual debut was 14.91 \((SD = 1.52)\) and there was no significant difference between males and females, \(t(87) = .57, p = .54\). Of the 91 adolescents who had engaged in sexual intercourse, when asked how many sexual partners they have had in their lifetime, 19.5 percent \((n = 31)\) reported one partner, 20.8 percent \((n = 33)\) reported between two to three partners, and 17 percent \((n = 27)\) reported 4 or more partners.
Table 2

*Descriptive Statistics for Parents Education Level*

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Mom/Maternal Guardian</th>
<th>Dad/Paternal Guardian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>n</em></td>
<td>%</td>
</tr>
<tr>
<td>No Formal Schooling</td>
<td>3</td>
<td>1.9</td>
</tr>
<tr>
<td>Elementary School Only</td>
<td>1</td>
<td>.6</td>
</tr>
<tr>
<td>Some High School</td>
<td>19</td>
<td>11.9</td>
</tr>
<tr>
<td>Completed High School/GED</td>
<td>28</td>
<td>17.6</td>
</tr>
<tr>
<td>Some College</td>
<td>26</td>
<td>16.4</td>
</tr>
<tr>
<td>Two-Year College Degree</td>
<td>19</td>
<td>11.9</td>
</tr>
<tr>
<td>Four-Year College Degree</td>
<td>35</td>
<td>22.0</td>
</tr>
<tr>
<td>Some Graduate School</td>
<td>3</td>
<td>1.9</td>
</tr>
<tr>
<td>Completed Graduate/Professional School</td>
<td>21</td>
<td>13.2</td>
</tr>
<tr>
<td>Other/Don’t Know</td>
<td>4</td>
<td>2.6</td>
</tr>
</tbody>
</table>

*Note:* One participant did not provide dad/paternal guardian information.
Procedures

The primary investigator conducted the study using an anonymous online survey through Qualtrics, a secure survey software program. Once parental consent was received, the primary investigator emailed the adolescent participant a link to the online survey containing the assent form and all measures. The email encouraged the participant to complete the survey in a private and quiet space, and reminded the participant that the survey was anonymous and his/her parents/legal guardians would never know how the questions were answered.

In the case of the two high schools where parental consent forms were collected in hardcopy, the adolescents were given two weeks to return the hardcopies to their teachers. The primary investigator then returned to each school, and adolescents who had returned a signed parental consent forms went to a private computer lab to read, sign, and complete the online survey during a designated class period. In the computer lab, the primary investigator provided each participant with the link to the assent form and directed participants to sit two computers apart to provide privacy. Once participants were situated and able to open the link the primary investigator left the room to allow participants to complete the survey in private, but was available in the hallway in case participants had questions.

The online survey included fixed-response items, Likert-type scales, and open-ended questions (see Appendix G). The first part of the survey provided a short introduction and asked participants if they had ever talked to their mom/maternal guardian, dad/paternal guardian, and/or friends about sex. In addition, participants completed measures on how often they had talked to their parents and peers about
specific sex related topics (e.g. sex, condom use, protecting self from sexual transmitted infections). Next, to assess what is actually said in parent-adolescent conversations about sex and how adolescents perceive the parental message as effective/ineffective, participants were asked to write – in an open-ended, expandable text box – about a time when their parent(s)/guardian(s) had a conversation with them regarding sex. Previous research shows that this type of communication usually involves either the mother or father and not both parents (Guilamo-Ramos et al., 2012). However, to make sure adolescents could report about the most memorable time their parent(s)/guardian(s) spoke with them, the term parent(s)/guardian(s) was used to account for the possibility that parents/guardians talked to their adolescent children about sex together. Specifically, instructions read:

*For this question please think about a time when your parent(s)/guardian(s) had a conversation with you regarding sex. Remember, this can be a formal “sex talk” or it could be any time your parent(s)/guardian(s) may have had a conversation with you regarding sex. If your parent(s)/guardian(s) have talked about sex more than once, try to remember the conversation that meant the most to you or is the most memorable. In other words, I’m interested in hearing about the conversation you remember most. This can be a conversation you had with your mom, dad, stepmom, stepdad, legal guardian or any combination of your parents. Specifically, recreate what your parent(s)/guardian(s) said to you about sex during the conversation and be as detailed as you can.*

Participants were encouraged to provide as much detail as possible in recreating what their parent(s)/guardian(s) communicated throughout the specific conversation.
After writing about the conversation, participants answered questions about the conversation they described, including their perceptions on conversational effectiveness (i.e., how helpful the conversation was) and parents’ communication competence (i.e., ability to communicate ideas appropriately).

In order to assess what adolescent participants perceive as an ideal parent-adolescent conversation, participants were then asked what they wished their parent(s)/guardian(s) had said or done differently in the conversation they had described in a second open-ended, expandable text box. The specific instructions read: *If you could go back and redo the conversation you wrote about above, what do you wish your parent(s)/guardian(s) had said or done differently, if anything?*

The second section of the survey included closed-ended survey measures to assess adolescents’ perceptions of the general communication within their family (FCPs), along with relational closeness with their parent(s)/guardian(s). The third section included closed-ended questions on adolescents’ sexual risk-taking and permissive sexual attitudes. In the last part of the survey, participants were asked to provide basic demographic information about themselves, including sex, age, ethnicity, grade in school, religion, and parent(s)/guardian(s) educational level. Upon completion of the online survey, the survey directed participants to a page not linked to their completed survey where they had the opportunity to enter their email address to receive a gift card for one song download on Amazon.com (see Appendix H).

**Measures**

**Communication effectiveness.** In order to assess adolescents’ perceptions of how effective their parents were in the conversation about sex, the participants completed the
Conversational Effectiveness Scale (Canary & Spitzberg, 1987, 2004). To curb against participant exhaustion, for the current study, the scale was revised from a 20-item scale to a 5-item measure that focused on the parents’ effectiveness during the conversation (e.g. “Our conversation was very beneficial,” “It was a useless conversation”). The Likert-type scale ranges from 1 (strongly disagree) to 7 (strongly agree), and three of the five items were reverse coded so that higher scores represented higher perceived parent conversational effectiveness. Previous research on older adolescents has established this measures reliability ($\alpha = .96$), as well construct and concurrent validity (Canary & Spitzberg, 1987). Items were averaged to create an overall score of participants’ perceptions of their parents’ effectiveness during the communication ($M = 4.55$, $SD = 1.73$). The revised scale was reliable ($\alpha = .90$).

**Communication competence.** Adolescents assessed their parents’ communication competence in the discussion of sex using Guerrero’s (1994) Communication Competence Scale. In the current study, the six-item scale was adapted to assess parents’ ability to communicate and listen during the conversation about which participants wrote. Overall reliability and validity for this scale was established in previous studies (see Afifi et al., 2008; Guerrero, 1994). The Likert scale ranges from 1 (strongly disagree) to 5 (strongly agree). The measure was adapted to reflect the adolescents’ perceptions of their parents’ communication competence in the specific conversation (e.g., “My parent was a good communicator,” “My parent’s communication was appropriate to the situations at hand”). One item was reverse coded so the higher scores represented higher perceived parent communication competence. A composite for communication competence was calculated by averaging the five items together ($M = \ldots$).
Reliability analysis in the present study indicated strong measurement internal consistency ($\alpha = .90$).

**Communication frequency.** To assess the frequency with which adolescents talk with parents and friends about sex, participants completed Sales, Milhausen, and DiClemente’s (2011) Parent-Adolescent Communication Scale (PACS). The original scale is a 5-item scale with the root question: “How often have you and your parent(s) talked about the following...” The topics included (a) sex, (b) how to use condoms, (c) protecting oneself from sexually transmitted infections (STIs), (d) protecting oneself from AIDS, and (e) protecting oneself from becoming pregnant. For the current study one item on “the pros and cons of engaging in sex” was added to capture more general conversation topics about sex. Each item was measured on a Likert-type scale of 1 (never), 2 (rarely), 3 (sometimes), and 4 (often). This scale was originally used to assess only adolescent girls, but was adapted to assess adolescent boys and girls.

A second scale with the same items also was adapted and used to assess the frequency adolescents talk with peers about sex. Higher scores indicate more frequent conversations about sex. Consistent with Sales et al. (2011) research, scores on the six items were summed to create a composite score. Scores for both parent and friend scales ranged from 6 to 24. The mean score for participants on the parent scale was 13.44 ($SD = 6.25, \alpha = .91$) and on the friend scale was 15.83 ($SD = 5.47, \alpha = .89$). Higher scores indicate higher frequency of communication about sex.

**Closeness.** The Inclusion of Other in the Self (IOS) scale is a single item (7-point scale) pictorial measure of closeness or interpersonal interconnectedness (Aron, Aron, & Smollan, 1992). For the IOS scale participants select the picture that best represents their
relationship with another person from a set of seven Venn-diagrams, each illustrating varying levels of overlapping closeness. The seven pairs of circles are arranged progressively from zero overlap (1, low degree of closeness) to almost complete overlap (7, high closeness, see Appendix G). Within the diagram one circle represents the “self” or individual completing the measure (i.e., participant) and the other circle represents the “other” or the person the participant is asked to think about. Aron and colleagues (1999) argue that inclusion of others in the self is synonymous with relationship closeness. In contrast to other relationships, close relationships, such as the parent-child relationships have been traditionally defined as those in which the individual feels a greater sense of union, proximity, and interdependence with the relationship partner. In this sense, one becomes close with their relationship partner as the partner becomes part of the self (see Aron et al, 1992, 2004). In particular relevance to the current study, IOS accounts for cognitive and emotional features of closeness compared to other measures and it is useful in studying younger participants (i.e., children and adolescents) because it is an easy to read and interpret one-item scale (Aron et al., 1992, 2004). The current study used IOS to examine adolescents’ perceived closeness with the parent(s)/guardian(s) who had the “sex talk” with them. On average, participants reported moderate closeness with their parents ($M = 4.25, SD = 1.86$).

**Family communication patterns.** Adolescents’ perceptions of their family communication climate were assessed using the Revised Family Communication Patterns (FCP) scale (Fitzpatrick & Richie, 1994; Koerner & Fitzpatrick, 2002; Ritchie & Fitzpatrick, 1990). The RFCP scale consists of 26 Likert-type items that measure the extent to which family communication patterns reflect conversation orientation (15 items)
and conformity orientation (11 items). The conversation orientation sub-scale measures the amount of openness, free expression of ideas, and individuality that occurs within the family (e.g., “My parent(s) often ask my opinion when the family is talking about something,” “My parent(s) encourage me to challenge their ideas and beliefs”). The conformity orientation scale measures the extent of conformity to parental authority that occurs within the family (e.g., “When anything really important is involved, my parent(s) expect me to obey without questions,” “My parent(s) feel it is important to be the boss”). For each scale item, participants responded on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Reliability and validity for the RFCP scale is well-established (e.g., Fitzpatrick & Richie, 1994; Koerner & Fitzpatrick, 2002; Ritchie & Fitzpatrick, 1990), and in the current study Cronbach’s alpha revealed good reliability for both conversation orientation ($\alpha = .94$) and conformity orientation ($\alpha = .86$). In the current study, higher scores on conversation orientation ($M = 4.48$, $SD = 1.34$), and conformity orientation ($M = 4.22$, $SD = 1.14$), indicated a greater perception of conversation and or conformity orientation.

**Sexual risk-taking.** To assess adolescents’ history of sexual risk-taking, the Adolescent Sexual Activity Index (Hansen, Paskett, Carter, 1999; Hansen, Wolkenstein, Hahn, 1992) was adapted for use in the current study. The scale (Hansen et al., 1999) consists of 13 common precoitus behaviors (e.g., kissing, cuddling) during adolescence (age 14-18) for the current study. The scale originally assessed participants’ behaviors in the past 30 days. For the present study, the scale was adapted to measure adolescents’ overall sexual activity and not just the past month to gain a global response to their sexual behaviors and to maintain consistency with other measures. Due to adapting the scale to a
global report of adolescents’ sexual behaviors one-item (i.e., “How many different people have you had sex with in the past year”) was removed because it became redundant with another item. Because the current study is specifically examining adolescents’ risky sexual behaviors, two-items specific to sexual risk-taking (e.g., unprotected oral sex, unprotected sex) were also included. The adapted 13-item scale asked, “In your life, have you participated in the following behavior with a romantic partner?” Participants were asked to respond yes or no to each of the following items: (1) hugging, (2) holding hands, (3) spending time alone, (4) kissing, (5) cuddling, (6) laying down together, (7) having someone put his or her hand under your clothes, (8) having put your hand under someone else’s clothes, (9) being undressed with sex organs showing, (10) engaging in unprotected oral sex, (11) engaging in unprotected sexual intercourse. In addition to these items, two additional items were included, (12) how many times have you had sex in your lifetime and (13) how many different people have you had sex with in your lifetime? Based on Hansen’s suggestion (personal communication, January 9, 2014), the original coding scheme was adapted such that lower risk behaviors (e.g., items 1-9) were scored lower (no = 1, yes = 2) than higher risk behaviors (i.e., items 10 and 11)(e.g., oral sex, no = 1, yes = 4; sexual intercourse, no = 1, yes = 6). This measure reflects the progression of sexual involvement from low-risk behavior (e.g., holding hands) to high-risk behavior (e.g., unprotected sex), thus adolescents who self-report more sexual activities are more susceptible to sexual risk (e.g., STIs/AIDs, teen pregnancy). Items 12 and 13 were multiple choices and were scored from one to five (0 = 1, 1 = 2, 3 = 4, 4 or more = 5). All behaviors were summed to create a composite score of sexual behavior and scores ranged
from 13 to 39 ($M = 27.89$, $SD = 8.58$) with higher scores indicating higher levels of sexual risk behavior.

**Permissive sexual attitudes.** To assess adolescents’ permissive attitudes about sexual risk-taking, participants completed an adapted version of the Sexual Knowledge and Attitude Test for Adolescents scale (SKAT-A; Fullard & Scheier, 2011; Fullard, Scheier, Lief, 2005). The most recent version of SKAT-A is developmentally appropriate for youth ages 12 to 18 and assesses adolescents’ evaluation and knowledge on pregnancy/masturbation, abstinence/sexual awareness, orgasm, masturbation, negative consequences of sex, and homosexuality. The Likert scale ranges from 1 (*strongly disagree*) to 5 (*strongly agree*). The original 40-item scale contained six specific content subscales: premarital sex (5-items), masturbation (7-items), homosexuality (4-items), pornography (5-items), abortion (5-items), and sexual coercion (14-items). Because this study is focused on adolescents’ attitudes towards premarital sex and/or risky sexual behavior it was adapted to include only the premarital sex subscale that specifically measures attitudes towards premarital sex. Examples of items included, “Teenagers should be encouraged to remain virgins” and “Sex before marriage is morally wrong.” Since the goal of the current study was also to understand how parent-child communication about sex impacts adolescents’ attitude towards risky sexual activities, four additional items were added to emphasize risky sexual behaviors during adolescence (e.g., “Unprotected sex between adolescents is NOT okay” and “Having multiple sexual partners is okay”). To get participants’ average scores, five items were reverse coded and higher scores reflected more liberal attitudes towards premarital sex and sexual behaviors. Previous research has established that this measure reflect good alpha reliability (.73 -
.88), as well as high levels of concurrent, construct, and discriminant validity (see Fullard & Scheier, 2011; Fullard, Scheier, Lief, 2005 for review). In the current study Cronbach’s alpha revealed acceptable reliability (α = .83).

**Inductive Coding Analysis for Open-Ended Items**

To identify adolescents’ perceptions about their parents’ communication with them about sex, the open-ended data were coded in a series of steps. Analytic induction (Bulmer, 1979) was used to code the initial thematic categories that emerged from adolescents’ perceptions of what is actually said (i.e., actual conversations) and what parents should say (i.e., ideal conversations) in parent-adolescent conversations about sex-related topics. Consistent with Bulmer (1979) and Vangelisti et al.’s (1999) coding procedures, the primary investigator and a researcher familiar with the study each read through all of the adolescents’ responses describing the actual and ideal parent-adolescent conversations about sex and independently devised an initial list of categories for themes that characterized separately the actual and ideal conversations. An additional twenty percent of the data were reviewed based on this preliminary list of categories, allowing thematic categories for actual and ideal to be redefined and/or collapsed as necessary, resulting in a final list of seven thematic categories of actual conversations, including safety, underdeveloped/unsuccessful, warning/threat, no talk, comprehensive-talk, and wait and six thematic categories of ideal parent-adolescent conversations, including no change, be more specific/provide guidance, talk to me, collaborate, and appropriateness. Next a codebook was created with definitions and examples of each category (see Appendix I).
Upon creation of the codebook, one research assistant—unaware of the study hypotheses—was trained on the actual and ideal coding schemes. Prior to coding data, agreement on coding requirements was achieved between the primary investigator and research assistant by coding ten-percent of each data set. The primary investigator and research assistant independently then coded the full set of actual and ideal conversations. Intercoder reliability across the whole data set for actual conversations (percent of agreement = 91%, $k = .87$) and ideal conversations (percent of agreement = 88%, $k = .83$) were acceptable and all disagreements were resolved through discussion such that one final code was assigned. Actual and ideal conversation themes are further discussed in the results.

**Summary**

This chapter featured the recruitment, participants, procedures, and measures used to examine adolescents’ perceptions of parents communication about sex. The next chapter will provide the process and results of the analysis.
CHAPTER THREE

RESULTS

The current chapter provides an overview of the inductive coding and statistical analyses conducted to test the research questions and hypotheses proposed in Chapter One. The present chapter begins with descriptive statistics and then presents the results pertinent to hypotheses and research questions in the order in which they were presented in the first chapter.

Descriptive Statistics

Descriptive statistics were performed on all study variables in order to ensure the accuracy and normalcy of the data. Descriptive statistics for all variables including means, standard deviations, and zero-order correlations are presented in Table 3. Data were examined for both univariate and multivariate outliers on all variables and none were identified. In addition, collinearity diagnostics were run on all variables in the multiple regression analysis and revealed no problems with multicollinearity. The following section summarizes the findings of the bivariate analysis on parent and peer communication frequency.
Table 3

Descriptive Statistics and Zero-Order Correlations for All Study Variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parent Frequency</td>
<td>13.44</td>
<td>6.25</td>
<td></td>
<td>.02</td>
<td>.22*</td>
<td>.50**</td>
<td>.49**</td>
<td>-.23*</td>
<td>.28**</td>
<td>-.16*</td>
<td>-.17*</td>
</tr>
<tr>
<td>2. Peer Frequency</td>
<td>15.83</td>
<td>5.47</td>
<td></td>
<td>.01</td>
<td>-.01</td>
<td>-.03</td>
<td>.11</td>
<td>.16*</td>
<td>.36**</td>
<td>.38**</td>
<td></td>
</tr>
<tr>
<td>3. Closeness</td>
<td>4.25</td>
<td>1.86</td>
<td></td>
<td>.40**</td>
<td>.38**</td>
<td>-.14</td>
<td>.60**</td>
<td>-.01</td>
<td>-.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Competence</td>
<td>3.18</td>
<td>1.12</td>
<td></td>
<td>.79**</td>
<td>-.29**</td>
<td>.42**</td>
<td>-.26*</td>
<td>-.37**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Effectiveness</td>
<td>4.55</td>
<td>1.73</td>
<td></td>
<td>-.33**</td>
<td>.40**</td>
<td>-.18*</td>
<td>-.37**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Conformity Orientation</td>
<td>4.22</td>
<td>1.14</td>
<td></td>
<td>-.17*</td>
<td>.17*</td>
<td>.17*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Conversation Orientation</td>
<td>4.48</td>
<td>1.34</td>
<td></td>
<td></td>
<td>.02</td>
<td>-.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Sexual Behavior</td>
<td>27.75</td>
<td>8.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.62**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Sexual Attitude</td>
<td>2.88</td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the p < .001 level
*. Correlation is significant at the p < .05 level
Parent and Peer Communication Frequency

Given that past research has found that frequency of parent-adolescent communication about sex relates negatively to adolescents’ sexual behavior and attitudes, there was a reason to expect that adolescents’ reports of frequency of parent-child communication about sex in the current study would also relate negatively to adolescents’ sexual risk-taking (H1a) and permissive sexual attitudes (H1b). Bivariate correlations were conducted to test these hypotheses. H1a was supported. In particular, there was a small significant negative association between adolescents’ self-reported frequency of communication with parents about sex-related topics (e.g., sex, condoms, STIs/AIDS, pregnancy) and adolescents’ sexual risk-taking, \( r = -.16 \) (\( p < .05 \), \( r^2 = .03 \)). This relationship suggests that as adolescents’ reports of communication frequency with their parents increased, their self-reported risky sexual behavior decreased. There was also a small significant negative correlation between frequency of communication about sex-related topics with parents and adolescents’ permissive sexual attitudes, \( r = -.17 \) (\( p < .05 \), \( r^2 = .03 \)), such that as communication frequency increased adolescents also reported less permissive attitudes toward sex. Thus H1b was also supported. Together, results for H1a and H1b yielded modest support for the idea that more frequent communication with parents is related to lower levels of sexual risk-taking and less endorsement of permissive attitudes about sex for adolescents in the current sample.

In contrast to parental communication frequency, research has found that frequency of peer communication often normalizes risk associated with sexual behaviors and permissive attitudes (Balalola, 2004; Dorsey et al., 1999). Thus, the second hypothesis tested the prediction that the frequency of peer communication about sex
would be positively related to adolescents’ sexual risk-taking (H2a) and permissive sexual attitudes (H2b). Additional bivariate correlations were conducted to test these hypotheses. As predicted, H2a and H2b were supported. There were significant positive correlations between peer frequency of communication about sex-related topics and adolescents’ sexual risk-taking, $r = .36$ ($p < .001$, $r^2 = .13$) and permissive sexual attitudes, $r = .38$ ($p < .001$, $r^2 = .14$). Thus, the more adolescents reported talking to their peers about sex, the more risky behavior and permissive attitudes they also reported.

To test if parent-child communication moderates the association between peer communication and adolescents’ risky sexual behavior (H3a) and permissive attitudes (H3b) a series of linear regression models were completed using Hayes’ (2013) PROCESS macro, a computational tool for conducting moderation and mediation analyses that facilitates tests of indirect effects. Two separate models were run in which the frequency of peer communication about sex was entered as the focal independent variable, adolescents’ sexual risk-taking (H3a) and permissive sexual attitudes (H3b) were entered as the dependent variables, and adolescents’ reports of the frequency with which they communicated with their parents about sex was entered as the moderator. Consistent with bivariate correlations, the regression analyses indicated significant main effects for both sexual risk-taking, $R^2 = .18$, $F(3, 155) = 11.11$, $p < .001$ and permissive attitudes $R^2 = .18$, $F(3, 155) = 11.03$, $p < .001$. Examination of the interactions revealed that parental communication frequency about sex approached significance as a moderator between peer communication frequency about sex and adolescents’ sexual risk-taking, $\Delta R^2 = .02$, $F(1, 155) = 3.69$, $p = .06$. PROCESS provided a decomposition of the conditional effects at three levels of the moderator (one SD below the mean, the mean,
one SD above the mean) in accordance with recommendations by Aiken and West (1991). The decomposition indicated that, as communication with parents increased, the positive association between peer communication frequency and sexual behaviors was stronger ($1 SD = 1.6, p < .05, M = .22, p < .001, +1SD = .34, p < .001$). In other words, when considered in conjunction, and contrary to expectations, more frequent communication with peers and parents predicts more sexual risk-taking. More frequent communication with parents about sex was not a significant moderator between peer communication about sex and adolescents’ permissive sexual attitudes, $\Delta R^2 = .01, F(1, 155) = .01, p = .97$.

The standardized regression coefficients for both models are displayed in Table 4.

**Table 4**

*Regression Model Coefficients for the Effects of Peer Communication Frequency on Adolescents’ Sexual Behavior and Attitudes as Moderated by Parental Communication Frequency*

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sexual Behavior</td>
<td>p values</td>
<td>Sexual Attitudes</td>
<td>p values</td>
</tr>
<tr>
<td>Predictors</td>
<td>Coefficients</td>
<td></td>
<td>Coefficients</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>2.13 (.05)</td>
<td>&lt;.001</td>
<td>2.24 (.06)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Parent Communication Freq.</td>
<td>-.09 (.04)</td>
<td>&lt;.05</td>
<td>-.14 (.06)</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Peer Communication Freq.</td>
<td>.23 (.05)</td>
<td>&lt;.001</td>
<td>.35 (.07)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Peer Freq. x Parent Freq.</td>
<td>.09 (.04)</td>
<td>&lt;.05</td>
<td>-.02 (.06)</td>
<td>.973</td>
</tr>
<tr>
<td>Interaction $\Delta R^2$</td>
<td>.02</td>
<td>.06</td>
<td>.01</td>
<td>.971</td>
</tr>
</tbody>
</table>

*Note.* Standard errors are in parentheses.
Parent-Adolescent Closeness

In addition to communication frequency, research has also established parent-child relational closeness as one of the most stable predictors of adolescents’ future sexual attitudes and behaviors (Miller et al., 2001). Thus Hypothesis 4 predicted that parent-adolescent relational closeness would be negatively related to adolescents’ sexual risk-taking (H4a) and permissive sexual attitudes (H4b). Unexpectedly, bivariate correlation analyses indicated nonsignificant, small correlations between relational closeness and adolescents’ sexual risk-taking, $r = -.01$ ($p = .44, r^2 = .001$) and permissive sexual attitudes, $r = -.08$ ($p = .17, r^2 = .006$). Thus Hypothesis 4 was not supported.

Parent-Child Biological Sex Difference

Research Question 1 investigated if adolescent sex predicts the gender of the parent adolescents report talking to about sex-related topics. The results of Chi-Square analyses indicated that there was a significant difference between the adolescents’ biological sex and which parent they had talked to about sex $\chi^2 (3, N = 128) = 27.99, p < .001$. Follow-up pairwise comparisons were conducted to evaluate the difference among participants. In order to control for Type I error, the Bonferroni method was employed, wherein the analysis was tested at $p = .008$ level (or .05 divided by the number of comparisons) (Green & Salkind, 2008). The pairwise comparisons revealed that there was no significant difference in which parent male adolescents had talked to, but there was a significant difference in which parent female adolescents had talked to. Female adolescents were 62 times ($p < .001$) more likely to talk to mothers over fathers and 25 times ($p < .001$) more likely to not talk to neither parent over talking to fathers alone. In
other words, girls were significantly more likely to talk to their mothers or both parents than they were to talk to their fathers only (see Table 5 for frequencies).

Table 5

*Parent-Child Sex Difference in Communication about Sex Frequencies*

<table>
<thead>
<tr>
<th></th>
<th>Adolescent Females</th>
<th>Adolescent Males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
</tr>
<tr>
<td>Talked to Mothers</td>
<td>62</td>
<td>44</td>
</tr>
<tr>
<td>Talked to Fathers</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Talked to Both Parents</td>
<td>25</td>
<td>21</td>
</tr>
</tbody>
</table>

*Adolescents’ Reports of Conversational Content Themes*

The next series of research questions asked adolescents to write about actual and ideal parent-adolescents conversations about sex. Research Question Two asked what types of conversations adolescents reported that their parents have had with them about sex. In particular, participants were asked to report on what their parents said to them during the “sex talk” or the most memorable conversation their parents had had with them about sex. Six themes emerged characterizing the actual conversations about which adolescents wrote: *safety, underdeveloped/unsuccessful, warning/threat, no talk, comprehensive-talk, and wait*. Nine adolescent participants did not report a parent-child conversation and four adolescents’ (2.5%) responses were coded as uncodable because the responses were unreadable and/or made no sense. Each of the themes are defined and discussed below in order of reported frequency.

**Safety.** Several adolescents ($n = 36, 24\%)$ recalled their most memorable conversation about sex as focused on being safe, cautious, and/or careful to avoid contracting a sexually transmitted infection (STI) and/or AIDS. These conversations
included concern for general sexual safety and the importance of using protection (e.g.,
condoms). This theme was illustrated well by a 17-year-old boy who stated, “My dad told
me how to use a condom and that he wanted me to be safe if I decided to have sex” (#13,
note: parenthetical notations refer to the adolescents’ assigned participant number). A 16-
year-old girl described:

My mother works with teen parents at a high school and so she had a conversation
about always using condoms even though I'm on birth control, because you can
never be too safe. Basically any time my mother has talked to me about sex it has
been about using condoms. (#33)

These adolescents mentioned how their parents not only cautioned their children
about sexual safety, but they also explicitly discussed how to use protection. In addition
to preventing STIs, the safety theme was also captured in conversations when parents
explicitly talked about contraceptive use (e.g., condoms, birth control pill) to prevent
pregnancy. For example, a 16-year-old girl indicated, “The conversation I most
remember is about birth control and getting me on it so I would have less the risk of
getting pregnant” (#46). Similarly, a 17-year-old girl explained:

My mom always tells me to make sure that I am using protection. She was willing
to get me on the pill when I asked, but she never really said anything about STDs.
I just remember her saying she didn’t want me to have a kid at a young age like
her. (#76)

Overall, many of these conversations stressed the general importance of
adolescent sexual safety and details on how to use or get access to contraception to avoid
STIs/AIDs and pregnancy.
Underdeveloped/unsuccessful. Twenty-three percent \((n = 35)\) of the adolescents recalled conversations that were characterized as underdeveloped/unsuccessful. These were conversations that participants perceived as too basic or vague in discussing a sex-related topic. A 16-year-old boy illustrated this theme by stating, “My dad just said don’t have sex and that’s it” (#34), and a 17-year-old girl explained that her mom gave her, “the dumb old birds and the bees speech” (#98). Adolescents whose conversations were coded under this theme reported that their parent(s) had talked to them about sex, however the conversations were often short and/or underdeveloped in helping the adolescent make sense of sexual information.

Conversations that were coded as underdeveloped also included instances in which parents used sex education materials (e.g., book, pamphlet) as a substitute for directly engaging in a conversation. A 17-year-old girl explained, “my mom gave me a book that talked about sex and she told me to read it so I understand what it is. That was it” (#94). Within this theme, adolescents often editorialized about underdeveloped communication, evaluating it negatively within the description of the conversation itself. For example 16-one year-old boy also stated:

My mom gave me a pamphlet about sex and how babies are made and told me to read it. She said I could come to her with questions or something, but pretty much left me to read this cartoon pamphlet with weird pictures and no real info beside how babies are made. I remember it because I thought it was dumb and I knew about where babies come from because of TV. (#5)
These adolescents’ examples suggest that parents made an effort to inform their children about sex and sexual reproduction, however from the adolescents’ perspective it was an underdeveloped attempt.

**Warning/threat.** A number of adolescents ($n = 27, 18\%$) reported that their parents engaged them in conversations that focused on messages of warning, danger, and/or threat when talking about engaging in sexual activities including the potential long-term consequences of sexual behaviors during adolescence. Unlike the safety theme, parents’ conversations in the warning/threat category were not offering safe solutions to avoid pregnancy; rather they were equating sex and pregnancy with future negative consequences. For example, a 16-year-old girl recalled her mom saying, “Pretty much don't get pregnant because it will ruin your life and any future of going to college” (#9). Similarly, a 17-year-old boy explained, “If you get a girl pregnant you will have no social life, you will go to school and come home and work your ass off to pay for that child” (#154). Some parents also made explicit personal threats toward the adolescents to dissuade them from having sex. One 16-year-old boy explained that his dad stated, “Don’t have sex or I will chop off your penis” (#90). A parental threat was also illustrated in a 16-year-old girl’s conversation with her mom:

> Whenever we talk about sex it's always just my mom and I alone somewhere neither of us can escape. Most of the time this is in the car or just hanging out at home! Her first words are always, don't get pregnant before you can take care of the baby and provide for the baby the way they deserve or I'll be PISSED. (#102)
Overwhelmingly, these participants described warnings from their parents that engaging in sexual activity as an adolescent has the potential of ruining their future goals and dreams as well as posing imminent threats.

**No talk.** Twelve percent \((n = 18)\) of adolescent participants said that their parents never had a direct conversation with them or stated they talked to someone other than their parent about sex-related topics, such as friends, siblings, or high school teachers. For example, a 16-year-old girl stated that her parents, “Never said a word to me about sex, puberty, or relationships” (#15). An 18-year-old boy explained, “my parents never talk to me about sex just my brother” (#79). Thus, a sizeable minority of participants reported that their parents have never attempted to talk to them about sex-related topics.

**Comprehensive talk.** In contrast with participants whose parents never talked to them about sex, some adolescents \((n = 16, 10.7\%)\) recalled their parents having conversations that covered multiple topics related to sex. The comprehensive talk theme went beyond talking just about the physical aspects of sex and also included discussions about intimate relationships, emotions, feelings, and pressures associated with sex. A 16-year-old boy exemplified this theme in the explanation of a conversation he had with his dad:

> My dad has talked to me a few times about safe sex, but the one that I remember the most was when we were on a fishing trip and he told me that he was always there to talk to me about relationships, dating, and sex stuff. He told me that he never knew anything about safe sex and made some mistakes and he didn't want that to happen to me. He talk to me about how to use a condom and that I should use them during oral or regular sex. He wished I would wait until I'm in a
relationship where I truly love the person I'm with. We have talked since but it meant a lot to me that he made the conversation not so weird and that I could go to him with any questions and I have. (#28)

As this adolescent described, many of the conversations characterized by this theme also highlight it being the most memorable of many other conversations adolescents had with their parent(s). A 17-year-old boy described a similar conversation with his dad that illustrated this theme:

The one I remember we were just hanging out in the garage working on his truck. My cell buzzed and it was a girl from school texting me about plan for the weekend. My dad just asked me if I was interested in any girls and we joked about it a bit but then he got more serious and talked about always respecting a girl when dating her and that sex is a part of relationships but not to just jump into it because others are. Both people need to think about it since a lot is at stake with emotions and STDs. He said that I had my whole life to have sex and not to rush into it. He said he may not be up to date on what kids are saying or doing but I can always come and talk to him about anything. (#134)

In addition to most memorable, adolescents also described that their parents shared personal stories to illuminate their points. A 16-year-old girl described a conversation she had with both her parents in this way:

The one I remember the most is the time my dad and mom sat down and talked to me how big of a deal sex is. They explained it was important to find someone you love and care about because sex is not just physical it is emotional too. They both told me stories of times they had sex too young and how it really hurt them
emotionally. My dad’s high school girl friend broke his heart and my mom said she had sex with a boy friend and she knew she wasn’t ready but she did it because her friends were doing it. They wanted me to be smart and safe and only do it when I was ready not because other people say I have to or I should. I retold that conversation to my friends when they were debating having sex and warned them not to be pressured into it because it could break their hearts later. (#4)

Generally, conversations in this category included detailed descriptions of topics and/or stories their parents shared with them about sex, relationships, emotions, and more.

**Wait.** A little over nine percent ($n = 14$) of adolescent participants described conversations characterized by parents urging them to wait to have sex or delay their sexual debut. These conversations encouraged adolescents to wait to have sex either until marriage, until they found themselves in a committed relationship, with the “right” person, and/or into adulthood. A 17-year-old boy stated, “My dad just told me not to have sex until I’m married” (#139). Moreover, a 17-year-old girl explained, “My mom told me not to have sex right now and that it's better when you wait for the right one” (#92). Some adolescents also expressed discussing the reason to remain abstinent and why it is wrong. A 17-year-old girl described waiting this way:

> My mom and I discussed the reason people want to have sex so early on and whether if it's right or not to have sexual intercourse before getting married. In my case, both of us believe that it is wrong to do so. She explained to me that for people in love sex should not be the most important thing. True that! (#128)
Adolescents often captured this theme by explaining parent-adolescent conversations that focused on abstinence until adolescents were in a committed relationship or psychologically ready for sex.

As described in the above section, adolescents expressed many different types of parent-adolescent actual conversations they had experienced. Almost half of the adolescents described that their parents commonly talked to them about sexual safety or provided vague and basic information about sex (e.g., underdeveloped/unsuccessful). Less commonly reported were conversations that covered multiple topics related to sex (e.g., comprehensive-talk) and abstinence (e.g., wait).

**Adolescents’ Ideal Conversation Themes**

Because the conversations that adolescents reporting having with parents may not meet their needs, Research Question Three asked what types of conversations (i.e., content and approach) adolescents’ report wishing their parents would have with them about sex. In other words, after reporting on the actual conversations, adolescents were also asked how the conversation would change, if at all, if the conversation met their ideal for parent-child communication about sex. Five themes emerged: *no change, be more specific/provide guidance, talk to me, collaborate, and appropriateness*. Thirty-one ideal conversation accounts were left blank and two adolescents’ (1.6%) responses were coded as uncodable because the responses were unreadable or did not make sense. Each of the themes are defined and explained below in order of frequency – from most to least.

**No change.** Several adolescents \( n = 56, 43.8\% \) described that they would not change anything about the actual conversation they had with their parent(s). This number may be underestimated since the 31 who left the ideal textbox blank may have also been
indicating that it was ideal already. Indeed, this theme included numerous adolescents’ reporting one-word responses, such as, “nothing” (#150), “nope” (#157) or “no” (#87). Sometimes participants also included statements of changing nothing because the actual conversations were done well and/or provided enough information from the adolescents’ perspectives. A 17-year-old girl captured this theme, as she described, “Nothing it was extremely helpful. It really made me realize how stupid it is to have sex at my age. It might be fun and seem like everyone is out doing it, but being that girl isn't worth it” (#31). A 16-year-old girl also explained, “Nothing, it really helped me and I want to wait” (#4). Illustrated in this theme, many adolescents seemed content or did not have any suggestions regarding the parent-adolescent conversation they reported. Interestingly, then, the majority of participants were satisfied with their parents’ communication about sex.

**Be more specific/provide guidance.** Many participants \((n = 28, 21.9\%)\) wanted their parents to be more detailed or specific about sex-related topics during the conversation. Conversations in this theme included explicit statements of providing more detailed information and/or guidance about sex-related topics. For example, a 16-year-old girl offered, “inform me about the different types of birth control” (#85). Similarly, another 16-year-old girl also captured this theme when she explained:

> Maybe talk to me over just giving me a stupid pamphlet with pictures. My mom and me are close and I just wish she had talked to me about what sex was, the dangers, what dating is like and stuff like that. I trust her and I just wish she would’ve talked to me more then, and now. (#5)
Similar to this adolescent’s description, many adolescents stated that they trusted their parents’ information and they should be less worried or embarrassed about sharing specifics. For example, one 16-year-old boy said:

My dad and I are really close and I wished he trusted our relationship to talk to me about sex and relationships. I really respect him and I would trust any guidance he would give me. He shouldn’t be afraid to share his opinion or specific details about sex topics and I want him to have these conversations with me. I may actually tell him my feelings on this so he feels more comfortable. (#119)

As highlighted in this conversation, some adolescents also mentioned that if parents were willing to be open about specific topics the adolescents may feel more comfortable sharing more details about their thoughts or feelings regarding sex-related topics.

**Talk to me.** Approximately fifteen percent ($n = 19$) of adolescents expressed how they wanted their parents to talk to them about sex-related topics in an open, honest, and natural way. This theme was different than *be more specific/provide guidance* as it highlighted the adolescent just wanting their parent to say *something* about sex-related topics or having an actual conversation with them about sex. A 16-year-old boy recommended, “say something instead of nothing” (#40). A 17-year-old boy provided another example of this theme in the following, “Actually talk to me about sex. I was clueless and had to learn everything from my friends. He could have told me what sex meant and the importance of sex” (#3).

In addition to wanting them to have an actual conversation, adolescents also conveyed that parents should trust that their children can handle these conversations. A
16-year-old girl mentioned, “I’m not a little kid so she should trust that she could talk to me about sex stuff. It’s all over the TV, movies, Facebook so it shouldn’t be scary for parents these days” (#125). Similarly, a 16-year-old boy described, “Ok well, they could talk to me for a start. I’m not a little kid and we can talk about this stuff and it shouldn't be scary (#131). Moreover, this theme involved adolescents wanting their parent to be more open and honest about sex in the conversations. A 16-year-old girl offered:

Why not be more open and honest with me. I mean even at 16 I know a lot about sex and I want to know what you think about it and NOT just the scare tactic, tell me about your experiences and how to be safe from getting pregnant. I know I can look it up online, but coming from my mom or dad would just mean they care about me. Period. Talk to me! (#9)

This adolescent clearly wanted her parents to openly share their thoughts and experiences surrounding sex, as she perceived it as an indicator that they cared about her. Many other adolescents that reported this theme acknowledged that a parent talking to them about sex was also synonymous with showing they cared about the adolescents’ health and well-being.

Collaborate. Some adolescents \((n = 12, \, 9.4\%)\) expressed that ideal conversations about sex should be more collaborative and parents need to listen more and ask more questions of their children during conversations about sex. This theme emphasized dialogue in contrast with the less desirable format of a parent lecturing his/her child. For example, a 17-year-old girl stated, “let me talk more” (#136), and a 16-year old girl said:

It was great that she talked to me about stuff but I wish it would be more of a conversation were I can ask questions and we can talk about sex and relationships.
I know sex is more than just getting pregnant since my friends and I talk about it all the time and I just wish she would ask me questions and listen to me more. (#133)

Other adolescents articulated wanting their parents to listen to them and give them an opportunity to ask questions. A 16-year-old girl described:

I wish my mom would be more of a listener or answer questions rather than preach her views. I know NOT to do it, but there is more to it than that in my eyes. My mother and I have a very close relationship, but she is by far a better talker than listener. (#102)

These adolescents showcased the importance of parents learning to actually engage in a two-way conversation and allow the adolescent to express his/her opinion and ask questions that he/she may have.

**Appropriateness.** The remainder of adolescents ($n = 11, 8.6\%$) suggested that parents’ conversations about sex may be more effective if they changed their personal behavior and/or approach when talking with their child. Based on adolescents’ descriptions, appropriateness was viewed as parents controlling their emotions and being more prepared before talking with their child. For example, an 18-year-old boy explained, “Maybe if they were a little calmer I would have listened more. They were so angry” (#105). Appropriateness also included the way in which parents approached the conversation about sex. A 16-year-old girl whose mom had the sex conversation with her offered, “I wish she wouldn’t have done it in front of my boyfriend, because that allows him to think it's an option, when I don't want it to be one” (#1). Another 16-year-old girl explained:
I think that it would have been helpful for my mom to talk to me about the girl stuff with sex and my dad to tell me more about boys and relationships. It was weird to do it together and the conversation was so cold. (#127)

Summary

Overall, adolescents offered a variety of actual and ideal parent-adolescent conversations about sex. These inductive findings highlight the complexity of the parent-adolescent sex talk experience and offered insight into what types of conversation adolescents appreciated in understanding sex-related topics and behaviors.

Besides assessing these themes as separate units of information, another goal of this study was to understand how actual and ideal conversations related. As a result, the following section discusses the patterns that emerged.

Patterns Between Actual and Ideal Conversation Themes

After identifying actual and ideal conversation themes, Research Question Four asked if there were any identifiable patterns between the actual and ideal conversation types. In other words, based on adolescents’ actual conversations and ideal conversations were there any qualitative patterns or connections that further explained adolescents’ perceptions of ideal conversations about sex. To address this question, a qualitative cross-case analysis (i.e., “pattern coding”) was conducted to identify and cluster patterns according to adolescents’ actual and ideal themes (Huberman & Miles, 1985; Miles & Huberman, 1984, 1994). Miles and Huberman (1994) argued that to truly understand a phenomenon, the researcher must not only identify themes that emerge within the data, but also how those themes interact with each other to describe specific patterns in relationships.
Following Miles and Huberman’s (1994) suggestion, the cross-case analysis included case-oriented strategies to identify type of actual conversation to type of ideal conversation that adolescents described. This process involves assigning numerical codes to both actual conversation themes (1 = safety, 2 = comprehensive-talk, 3 = wait, 4 = warning/threat, 5 = underdeveloped/unsuccessful, 6 = no talk) and ideal conversation themes (1 = talk to me, 2 = be more specific/provide guidance, 3 = collaborate, 4 = appropriateness, 5 = no change, 6 = no talk) that would produce unique code patterns (Huberman & Miles, 1994) of which actual conversations corresponded with specific ideal conversations. For example, adolescents who reported safety as their actual conversation and be more specific as their ideal conversation received a code of 12. In a different example, if adolescents reported comprehensive-talk and no change they received a code of 25. Not all adolescents (n = 46, 28.9%) reported both actual and ideal conversations, and thus they were removed from the cross-case analysis.

Based on the cross-case analysis 22 combinations of codes were identified. Of the 22 combination codes, five emerged as the most frequently occurring patterns: (1) comprehensive-talk → no change; (2) underdeveloped → be more specific; (3) safety → no change; (4) safety → be more specific; and (5) no talk → talk to me. Only these top five patterns were considered in the analysis since they occurred ten or more times and accounted for 37.8 percent of the data. The other occurring patterns were infrequent and many of them only occurred once, thus not included in the final analysis. Table 5 includes frequencies and examples of the five main patterns.

The most commonly reported theme was comprehensive-talk → no change. Adolescents with this pattern of actual/ideal conversations described their parents having
the comprehensive-talk with them and offered no change; sometimes adolescents stated explicitly and other times it was unstated but presumable that because their parents’ conversation was meaningful or helped them understand sex, they would not change anything about it. The second most frequent pattern was underdeveloped/unsuccesful → be more specific. As the example in Table 5 illustrates, participants with this pattern wished their parents would go beyond the basics and/or try a bit harder. Another commonly occurring pattern included safety→no change, as adolescents found the talk about safety helpful. However, another pattern was safety→be more specific/provide guidance. An examination of their responses indicated that adolescents with this pattern wanted their parent to go beyond the basic safety speech and provide guidance of how to be safe or talk about different forms of birth control methods. The final pattern that emerged was no talk→talk to me. This pattern commonly included adolescents saying their parents said nothing to them related to sex and how they wished their parents would have just taken the time to talk to them about sex related topics.

Overall, the thematic analysis revealed distinct themes on what adolescents’ parents say concerning sex-related topics and what adolescents wish parents would say. In addition, through a cross-case analysis (Miles & Huberman, 1994) the results revealed conversation patterns that explain the parent-adolescent sex talk phenomenon. These findings suggest that comprehensive-talk and safety conversations that provided specifics on contraception, STIs/AIDs or pregnancy were ideal to the adolescent sample. Alternatively, the patterns analyzed here also suggest that adolescents who reported no communication, underdeveloped talks, or safety conversations on general references to being safe wished for more specific communication from parents.
Table 6

Frequencies and Examples of Main Actual and Ideal Patterns

<table>
<thead>
<tr>
<th>Actual and Ideal Patterns</th>
<th>n</th>
<th>%</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive-talk → No Change</td>
<td>14</td>
<td>8.7%</td>
<td>Actual: “The one I remember the most is the time my dad and mom sat down and talked to me how big of a deal sex is. They explained it was important to find someone you love and care about because sex is not just physical it is emotional too. They both told me stories of times they had sex too young and how it really hurt them emotionally. My dads high school girl friend broke his heart and my mom said she had sex with a boy friend and she knew she wasn’t ready but she did it because her friends were doing it. They wanted me to be smart and safe and only do it when I was ready not because other people say I have to or I should…” Ideal: “Nothing, it really helped me and I want to wait.”</td>
</tr>
<tr>
<td>Underdeveloped/Unsuccessful → Be More Specific/Provide Guidance</td>
<td>13</td>
<td>8.3%</td>
<td>Actual: “Mom gave me a brief talk about what a period is and once I got it she said I need to be careful since I can get pregnant now.” Ideal: “Go beyond information about puberty and basis of sex and really talk about it so it helps me.”</td>
</tr>
<tr>
<td>Safety → No Change</td>
<td>12</td>
<td>7.6%</td>
<td>Actual: “The conversation I most remember is about birth control and getting me on it so I would have less the risk of getting pregnant.” Ideal: “Nothing.”</td>
</tr>
<tr>
<td>Safety → Be More Specific/Provide Guidance</td>
<td>11</td>
<td>6.9%</td>
<td>Actual: “To always be safe and use condoms if having sex because don't want to get an STD. All our conversations were based about using a condom or other protecting from STDs.” Ideal: “I liked that she actually talked to me about being safe, but still want more details on being safe. Like using a condom for oral sex and other options than just condoms. They’re expensive and couldn’t always get them.”</td>
</tr>
<tr>
<td>No Talk → Talk to Me</td>
<td>10</td>
<td>6.3%</td>
<td>Actual: “My parents do not openly talk about sex.” Ideal: “I wish they could talk to me about sex. But it's already to late since I’m pregnant.”</td>
</tr>
<tr>
<td>All Other Patterns (&lt; 10 occurrences)</td>
<td>53</td>
<td>33.3%</td>
<td></td>
</tr>
<tr>
<td>Missing Patterns</td>
<td>46</td>
<td>28.9%</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Forty-six were listed as missing*
The subsequent sections examine how the actual conversation themes are associated with adolescents’ sexual attitudes and behaviors, as well as perceived communication competence and effectiveness.

**Actual Conversation Themes and Adolescents’ Attitudes and Behaviors**

In order to test Hypothesis Five, two separate one-way analysis of variance tests (ANOVAs) were conducted to evaluate the differences between type of actual conversations adolescents reported having with their parents and adolescents’ sexual risk-taking (H5a) and permissive sexual attitudes (H5b). As previously summarized, the independent variable, actual conversation theme, included six levels: safety, underdeveloped/unsuccessful, warning/threat, no talk, comprehensive-talk, and wait. The dependent variables in the one-way ANOVA analyses included adolescents’ report of their risky sexual behavior and attitudes. The homogeneity of variance was met for both sexual risk-taking (1.56, \( p > .05 \)) and permissive attitudes (2.83, \( p > .05 \)), which indicates that the variance within the sample was equal. However, neither ANOVA was significant: neither sexual behavior, \( F(5, 140) = 1.23, p = .29, \eta^2 = .04 \), nor attitude, \( F(5, 140) = 1.04, p = .40, \eta^2 = .03 \) was explained by differences in the types of conversations participants reported having with their parents (see Table 7 for means and standard deviations). Hypothesis Five was not supported.

**Actual Conversations Themes and Perceived Communication Competence and Effectiveness**

Additional one-way ANOVAs were conducted to see if the types of conversations adolescents reported having with their parents were associated with the degree to which adolescents perceived their parents to be effective (H6a) and communicatively competent
(H6b) in these conversations. As previously noted, the independent variable was conversation theme (safety, underdeveloped/unsuccessful, warning/threat, no talk, comprehensive-talk, and wait). The dependent variables in these separate one-way ANOVAs were adolescents’ reports of their parents’ (a) effectiveness and (b) communication competence as they related to the conversation about sex. Homogeneity of variances was met (attitude, 2.10, p > .05; competence, 2.06, p > .05) in this analysis. Both effectiveness, \(F(5, 136) = 6.07, p < .001, \eta^2 = .18\), and communication competence, \(F(5, 136) = 9.65, p < .001, \eta^2 = .26\), were significantly predicted by type of conversation (see Table 7).

**Communication effectiveness.** Post hoc comparisons using the Tukey HSD test indicated that participants considered parents who had the *comprehensive-talk* conversations to be much more effective than parents who engaged in most other types of conversations. Adolescents whose conversations were characterized as *comprehensive-talk* (\(M = 6.36\)) perceived their parents as significantly more effective than parents whose conversations were categorized as focusing on safety (\(M = 4.63, p < .01\)), warnings (\(M = 4.49, p < .01\)), underdeveloped/unsuccessful (\(M = 4.09, p < .001\)), and no talk (\(M = 3.40, p < .001\)). There was no significant difference between any other conversation type on perceived effectiveness.

**Communication competence.** The findings for communication competence were similar. The post hoc comparisons indicated the mean score for *comprehensive-talk* (\(M = 4.45\)) was significantly different than safety (\(M = 3.30, p < .01\)), warning (\(M = 2.97, p < .001\)), underdeveloped/unsuccessful (\(M = 2.95, p < .001\)), and no talk (\(M = 2.09, p < .001\)). In other words, comprehensive-talk was found to be statistically more competent
than safety, warning, underdeveloped/unsuccessful, and no talk. Safety ($M = 3.30$) was also statistically significantly different than no talk ($M = 2.09, p < .01$). In addition, wait ($M = 3.60$) was significantly different than no talk ($M = 2.09, p < .01$). There were no other statistically significant differences in the other conversation in terms of adolescents’ perceptions of communication competence (see Table 7).

Overall, type of conversation is a significant predictor of perceived parental effectiveness and competence, with comprehensive-talk conversations being perceived as the most effective and competent. In addition, safety and wait were perceived as significantly more competent than no talk which was perceived as the least competent by adolescents in the sample. Underdeveloped conversations were also seen as fairly incompetent and ineffective. The following section continues to investigate the conversation themes within the larger family discursive climate.
Table 7

Mean and Standard Deviations for Conversation Themes ANOVA Analyses

<table>
<thead>
<tr>
<th></th>
<th>Safety</th>
<th>Underdeveloped/Unsuccessful</th>
<th>Warning/threat</th>
<th>No talk</th>
<th>Comprehensive-talk</th>
<th>Wait</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Sexual Behavior</td>
<td>28.86</td>
<td>8.41</td>
<td>29.11</td>
<td>8.26</td>
<td>27.52</td>
<td>8.56</td>
</tr>
<tr>
<td>Sexual Attitude</td>
<td>2.94</td>
<td>.60</td>
<td>2.90</td>
<td>.85</td>
<td>2.71</td>
<td>1.02</td>
</tr>
<tr>
<td>Competence</td>
<td>3.30</td>
<td>.96</td>
<td>2.95</td>
<td>1.15</td>
<td>2.97</td>
<td>1.04</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>4.63</td>
<td>1.56</td>
<td>4.09</td>
<td>1.65</td>
<td>4.92</td>
<td>1.95</td>
</tr>
</tbody>
</table>
Family Communication Patterns and Adolescents’ Actual Conversations

Research Question Five asked if family communication patterns (i.e., conversation and conformity orientation) predicted the types of actual conversation adolescents’ report having with their parents. A direct discriminate function analysis was conducted to determine whether conversation orientation and conformity orientation led to adolescents’ reports of actual conversation themes—safety, underdeveloped/unsuccesful, warning/threat, no talk, comprehensive-talk, and wait.

Multivariate analysis revealed that the overall Wilks’s lambda in the first discriminant function was statistically different, $\Lambda = .85$, $\chi^2 (10, N = 146) = 22.64$, $p < .01$, indicating that overall conversation and conformity orientations significantly differentiated among the six actual conversation themes. The first discriminant function accounted for 90 percent of the variance of the actual conversation themes. However the second discriminant function was not significant, $\Lambda = .98$, $\chi^2 (4, N = 146) = 2.26$, $p = .68$.

The first discriminant function’s structured weights and standardized canonical coefficients are presented in Table 8. Based on the coefficients, conversation orientation scores were positively correlated with the function and conformity orientation scores had a moderate negative correlation. Thus interpreting the means on the discriminate function, adolescents that came from families high in conversation were significantly more likely to report having the comprehensive-talk conversation ($M = .93$, $p < .01$) with parents than no talk ($M = -.38$, $p < .05$) or warning/threat ($M = -.41$, $p < .01$). Moreover, reclassification of cases based on new canonical variables was minimal and only 40.1 percent of the cases were correctly reclassified into their original categories. Overall, this analysis indicates families high in conversation orientation, or those that engage in more
open communication on a variety of topics, were more likely to engage in comprehensive-talk.

Table 8

*Structure Loadings and Standardized Canonical Coefficients for Discriminant Analysis*

<table>
<thead>
<tr>
<th></th>
<th>Function 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation coefficients</td>
<td>Standardized canonical coefficients</td>
<td></td>
</tr>
<tr>
<td>Conversation Orientation</td>
<td>.82</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>Conformity Orientation</td>
<td>-.68</td>
<td>-.58</td>
<td></td>
</tr>
</tbody>
</table>

In addition to evaluating the link between FCP dimensions and type of conversations adolescents reported having with their parents, another goal of this study was to understand how FCP related to adolescents’ perceptions of the messages parents provide. As a result, the following section investigates conformity and conversation as impact on the relationship between types of conversations and perceptions of communication competence and effectiveness.

**Creating Family Communication Patterns Dimensions**

Because the communication culture of some families may guide adolescents’ expectations for their parents’ communication generally and about sex, specifically, the current dissertation study also tested the assumption that the FCP dimensions (e.g., conformity and conversation) would moderate the relationships between conversation themes and the degree to which adolescents perceived their parent(s) as effective and communicatively competent during the conversation. In order to be able to test moderation effects using hierarchical regression analyses, the six *actual* conversation themes were collapsed into three types of conversation –
comprehensive-talk, specific-talk, and no talk. The six conversation themes were collapsed based on general aspects pertinent to the content in the theme. Comprehensive-talk remained its own conversation type, whereas conversations that emphasized specific sex-related topics (i.e., safety, warning/threat, and wait) were collapsed into specific-talk and conversations that had little to no talk (i.e., underdeveloped/unsuccessful, no talk) were collapsed into no-talk conversation type for the analysis. Next, the three conversation types were effect coded (i.e., comprehensive-talk = 1, specific talk = 0, no talk = -1). Following recommendations from Miles and Shevlin (2001) the conversation categories were effect coded instead of dummy coded since there was not an obvious reference group and it allowed testing deviations of group mean from the grand mean. If there is an interaction of the categorical variables, then effect coding also provides an estimate of both the main effect and the interaction effect (Cohen & Cohen, 1983).

To minimize multicollinearity all the variables were first mean-centered by subtracting the overall mean of each variable from each adolescent’s score (Kromrey & Foster Johnson, 1998). Mean-centering has several benefits, including reducing collinearity between the interactions and its original indicators (Aiken & West, 1991; Cohen, 1978, Little, Card, Bovaird, Preacher, and Crandall, 2007). Second, a simple two-step regression technique called “residual centering” (i.e., orthogonalizing) was conducted and all the interaction terms were created by centering the first-order predictors and by regressing product term onto the centered first-order predictors and saving the unstandardized residual (see Little et al., 2007 for details). This procedure ensures that the created orthogonalized interaction terms “contain the unique variance
that fully represents the interaction effect, independent from the first-order effect variance” (Little et al., 2007, p. 219).

Scores for conversation and conformity orientations may be analyzed as continuous dimensions or converted to discrete types (e.g., laissez-faire, protective, pluralistic, consensual). The latter approach typically relies on a high-low median split on each dimension that creates interpretive problems, as the effects of family type are not easily distinguished from the main effects for conversation and conformity. Moreover, mean or median splits arbitrarily separate cases with nearly the same value (Koerner & Fitzpatrick, 2002a) and can yield spurious results (Maxwell & Delaney, 1993). Thus, for the present study conversation and conformity orientation were analyzed as continuous dimensions in the regression analyses.

**Conformity Orientation and Perceptions of Effectiveness and Competence**

**Adolescents perceived effectiveness.** To test if conformity orientation would moderate the relationship between conversation themes and adolescents’ perceived effectiveness (RQ6a) and communication competence (RQ6b) a series of hierarchical regression analyses were conducted. The first regression model used effectiveness as the dependent variable and conformity orientation and types of conversations were entered into Block 1. These variables accounted for a significant amount of the variance of perceived parental effectiveness, $R^2 = .27$, $F(3, 137) = 17.07$, $p < .001$. Examination of the beta weights revealed that conformity orientation ($\beta = -.46$, $t = -3.85$, $p < .001$) and comprehensive-talk ($\beta = 1.19$, $t = 4.31$, $p < .001$) were significant predictors in the model. However, after entering the orthogonalized two-way interactions (conformity x types of conversations)

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4 Note: Since the conversation categories were effect coded this created two effect variables that were labeled as conversation1 (effect code = 1) and conversation2 (effect code = -1) with 0 as the comparison group. When conducting the regression both variables were entered into each step of the regression analyses (Miles & Shevlin, 2001).
conversations) into Block 2 none of the interaction terms was statistically significant
(conformity x type1, $\beta = -.22, t = -.59, p = .57$; conformity x type2, $\beta = -.41, t = 1.80, p
= .07$). These results indicated that conformity orientation does not moderate the
relationship between conversation type (*comprehensive-talk, specific talk, or no talk*) and
adolescents’ perceived effectiveness.

**Adolescents’ perceived competence.** In the second regression model competence
served as the dependent variable and conformity orientation and types of conversations
were again entered into Block 1. Similar to the first model, variables accounted for a
significant amount of the variance of perceived parental effectiveness, $R^2 = .28, F(3, 137)
= 18.04, p < .001$. Assessment of the beta weights revealed that conformity orientation ($\beta$
$= -.23, t = -2.96, p < .05$) and *comprehensive-talk* ($\beta = .92, t = 5.15 p < .001$) were
significant predictors in the model. When entering the orthogonalized two-way
interactions (conformity x types of conversation) into Block 2 no significant interaction
effect emerged. Overall the results imply that conformity orientation does not moderate
the relationship between *actual* conversation themes and adolescents’ perceptions of
parental effectiveness and communication competence.

**Conversation Orientation and Perceptions of Effectiveness and Competence**

**Adolescents’ perceived effectiveness.** The current dissertation study also tested
if conversation orientation would moderate the relationship between the *actual*
conversation themes and adolescents’ perceived effectiveness (RQ7a) and
communication competence (RQ7b). Therefore, another series of hierarchal regression
analyses were conducted. The first regression model used effectiveness as the dependent
variable and conversation orientation and types of conversation were entered into Block 1.
These variables accounted for a significant amount of the variance of perceived parental effectiveness, $R^2 = .28$, $F(3, 137) = 17.97, p < .001$. Inspection of the beta weights revealed that conversation orientation ($\beta = .41, t = 4.12, p < .05$) and comprehensive-talk ($\beta = 1.32, t = 4.06, p < .001$) were significant predictors in the model. Yet, the orthogonalized two-way interaction (conversation orientation x types of conversation) entered into Block 2 was not statistically significant. Results indicated that conversation orientation does not moderate the relationship between conversation type and adolescents’ perceived effectiveness.

Adolescents’ perceived competence. In the second regression model, competence served as the dependent variable and conversation orientation and types of conversation were again entered into Block 1. The variables accounted for a significant amount of the variance of perceived parental effectiveness, $R^2 = .34$, $F(3, 137) = 23.29, p < .001$. Examination of the beta weights revealed that conversation orientation ($\beta = .29, t = 4.55, p < .001$) and comprehensive-talk ($\beta = .83, t = 4.75, p < .001$) were significant predictors in the model. However, after entering the orthogonalized two-way interactions (conversation orientation x types of conversation, conversation x conformity) into Block 2, none of the interaction effects were significant. The results indicate that conversation orientation is not a moderator between actual conversation themes and adolescents’ perceptions of parental communication competence. Thus, parallel to RQ6ab the results show that conversation orientation does not moderate the relationship between conversation themes and adolescents’ perceptions of parental effectiveness and communication competence.
Family Communication Factors and Adolescents’ Sexual Behavior and Attitude

Finally, the current study predicted that factors associated with communication in the family, including parent and peer frequency, closeness, perceptions of effectiveness, perceptions of competence, conformity orientation, and conversation orientation would be associated with adolescents’ self-reports of sexual risk-taking (H7a) and permissive sexual attitudes (H7b). Two multiple regressions were conducted to test these hypotheses. The main effects were significant for both adolescents’ self-report of sexual risk-taking and permissive attitudes. For sexual risk-taking, $F(7,141) = , p < .001$, $R^2 = .21$, perceived communication competence ($\beta = -.28, p < .05$) and peer communication frequency ($\beta = .27, p < .05$) emerged as the strongest predictors in the model. For permissive sexual attitudes, $F(7,141) = , p < .001$, $R^2 = .28$, perceived communication competence ($\beta = -.26, p < .05$), perceived effectiveness ($\beta = -.21, p < .05$), and peer communication frequency ($\beta = -.23, p < .05$) were the strongest predictors in the model. Table 9 lists the beta weights and $p$ values for all the predictors in the model. Thus, the results reveal that among the predictors, perceived communication competence emerged as a moderate negative predictor for both sexual risk-taking and permissive sexual attitudes. Peer frequency communication also emerged as a moderate positive predictor for both sexual risk-taking and permissive attitudes. In addition, perceived effectiveness was a moderate negative predictor of sexual attitude. When taken together, the variables that seem to carry the most weight in predicting adolescent risk include both how often adolescents talk to peers about sex and the degree to which they feel their parent’s communication about sex was effective, appropriate, and helpful.
Table 9  

*Multiple Regression Beta Weights and p Values*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Sexual Behavior</th>
<th>Sexual Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>p</td>
</tr>
<tr>
<td>Parent Communication Frequency</td>
<td>-.03</td>
<td>.78</td>
</tr>
<tr>
<td>Peer Communication Frequency</td>
<td>.27*</td>
<td>.05</td>
</tr>
<tr>
<td>Closeness</td>
<td>.04</td>
<td>.93</td>
</tr>
<tr>
<td>Communication Competence</td>
<td>-.28*</td>
<td>.02</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>.05</td>
<td>.69</td>
</tr>
<tr>
<td>Conversation Orientation</td>
<td>.06</td>
<td>.20</td>
</tr>
<tr>
<td>Conformity Orientation</td>
<td>.10</td>
<td>.57</td>
</tr>
</tbody>
</table>

*Beta significant at the $p < .05$ level*
Summary

The current chapter described the results of the proposed research questions and hypotheses presented in Chapter One. Findings from the present study offer insights into the parent-adolescent sex talk experiences. Notably, adolescents’ perceptions of communication competence and effectiveness were the strongest predictors in reducing adolescents’ risky sexual attitudes and behaviors. In addition, the qualitative responses offered in-depth insight into the actual and ideal parent-adolescent conversation from an adolescent perspective. Implications of these findings are investigated in Chapter 4.
CHAPTER FOUR
DISCUSSION

The primary goal of the present study was to investigate the adolescent perspective surrounding parent-child communication about sex-related topics. More specifically, this study was designed to examine high school adolescents’ views on content, competence, and effectiveness surrounding parent-child sex communication, as well as how family climate impacts those views. Examining adolescents’ perspectives on parental communication about sex was important for a number of reasons.

First, although previous research has established the links between communication frequencies, relational closeness, sex differences and adolescents’ risky sexual attitudes and behaviors, it has done so largely from the adults’ perspectives (e.g., parents, college students; Miller et al., 2001). In other words, we know adults’ perceptions of factors that reduce adolescents’ sexual risk-taking, but less about adolescents’ own experiences surrounding those elements. Thus, to expand the scope of the research on those factors the present study examined adolescents’ perspective, as they ultimately make decisions regarding their sexual attitudes and behaviors.

Second, little research has focused on what parents say to their adolescents about sex and how those parent-adolescent messages relate to sexual risk-taking. The current study addressed this gap by asking adolescents to provide open-ended responses about actual and ideal parent-adolescent conversations about sex and then examining the links between inductively coded parent-child communication content and sexual risk-taking and permissive attitudes. This contribution to the literature is important because it
captures adolescents’ perspectives on what type of content helps them make sense of sexual risk.

Third, few studies evaluated the macro family discourses that exist (i.e., FCPs) and how those overarching patterns connect to adolescents’ perceptions of the sex talk (Allen, 2010; Koesten & Anderson, 2004). The present study examined adolescents’ viewpoints of conversation and conformity orientation and their role in adolescents’ attitudes and behaviors about sex, thereby understanding how family culture impacts adolescents’ perceptions of parent-adolescent conversations about sex. In short, these contributions provide evidence that prioritizing adolescents’ communication viewpoints is a much-needed perspective and one currently missing from the family communication literature (Miller-Day et al., 2013, Socha & Yingling, 2011).

The results revealed varying degrees of support for previous research on parent-child communication about sex and contributed new findings to the literature on parent-adolescent sex communication. Common factors in predicting adolescents’ sexual attitudes and behaviors including communication frequency, relational closeness, and sex differences both supported and contradicted previous research (see Miller et al., 2001 for review) suggesting further that it is imperative to understand sexual health from an adolescent perspective. To add to the extant literature, adolescents in the current study were asked to describe their perceptions of memorable conversations they had with their parents about sex. These responses resulted in a typology of message strategies that may be useful in future intervention design, particularly as they are understood in relation to how adolescents perceived them in terms of competence and effectiveness. Conversations that were comprehensive and about safety, for example, seem to meet the needs and
expectations of adolescents more than warnings, vague messages, or no communication at all. Another novel contribution of the current study emerges in the finding that out of all the variables adolescents’ perceptions of parental communication competence and effectiveness during conversations about sex were the most significant predictors in decreasing adolescents’ sexual risk-taking and permissive sexual attitudes. Peer communication frequency was also a significant predictor in increasing adolescents’ sexual risk-taking and permissive sexual attitudes.

In order to understand how adolescents’ perspectives are embedded in the larger family climate, the present study also examined family communication patterns (FCP), and how they influenced communication about sex. However, contrary to what was expected, the FCP dimensions (i.e., conversation and conformity orientation) had little association with adolescents’ perceptions of communication or sexual attitudes and behaviors. Some of the findings did suggest that high conversation and low conformity families engage in more detailed conversations about a variety of sex-related topics (e.g., comprehensive-talk).

Based on adolescents’ perspectives in the current study, it is clear there is no single solution for parents to help their adolescents make sense of sexual relationships and health. Yet collectively the findings in the current dissertation reveal underlying content, factors, and processes which point to the importance of parent-adolescent conversations about sex and offer a basis for developing translational scholarship.

This chapter discusses the implications and conclusions that stem from the present study’s findings. First, the results are considered in light of previous research on communication frequency and parental closeness. Second, implications of the actual and
ideal conversations, as well as adolescents’ perceptions of conversation competence and effectiveness are discussed. Third, parent-adolescent communication about sex is considered within the larger family climate. Finally, limitations and future considerations are presented along with recommendations for researchers and parents.

**Parent-Adolescent Communication about Sex-Related Topics**

**Communication frequency.** Numerous studies have suggested that parental communication frequency about sex is important in reducing sexual risk behaviors during adolescence (Booth-Butterfield & Sidelinger, 1998; Guilamo-Romos et al., 2011; Guzmán et al., 2003; Jaccard et al., 2000; Karofsky et al., 2001). The bivariate analysis the current study replicated these findings by supporting the negative association between parental communication frequency and adolescents’ sexual risk-taking and permissive sexual attitudes. Specifically, adolescents who reported their parents having more frequent conversations about sex, condoms, preventing STIs/AIDS and pregnancy, and the pros/cons of sex were also more likely to report less permissive attitudes and sexual risk-taking. However, the correlations were small and once frequency was considered with all the other factors considered in the current study – closeness, competence, effectiveness, conversation orientation, and conformity orientation – parental frequency was no longer a significant predictor in reducing adolescents’ risky sexual attitudes and behaviors. Thus, based on adolescents’ perspectives frequency was not a significant factor in reducing adolescents’ sexual risk-taking and permissive sexual attitudes.

In terms of peer communication frequency, adolescents that reported more frequently talking to their peers about sex-related topics were much more likely to report more permissive sexual attitudes and engage in more sexual behaviors. These results
confirm that frequency of peer communication relates to adolescent sexual decision-making (Balalola, 2004; Heisler, 2005) and may create a “culture of encouragement” surrounding risky sexual behaviors (Holman & Sillars, 2011).

Although previous research has found parental communication frequency reduces peer influence of sexual attitudes and behaviors (Whitaker & Miller, 2000), unexpectedly parental communication frequency about sex-related topics increased the strength of the correlation between peer influence and adolescents’ sexual risk-taking. One explanation for this unexpected finding is that frequently talking about sex-related topics may desensitize adolescents to risk and create a sense of normalcy about sexual behaviors (DiIorio et. al., 2002). For example, a few studies have found that adolescents were more likely to engage in sexual behavior when parents were more accepting of sexual activity (Manning et al, 2005) or the adolescents modeled their parents’ permissive attitudes and behaviors towards sex. More finite distinctions in the nature of the content in peer and parent conversations are required to better understand parents’ role in peer influence on sexual attitudes and behaviors during adolescence.

Overall, the current study found some inconsistencies with the previous research on parent-adolescent communication frequency. The current study provides a unique vantage point on frequency by examining it from the adolescents’ perspective. Although the adolescent perspective at the bivariate association modestly supports previous research findings (Booth-Butterfield & Sidelinger, 1998; Guilamo-Romos et al., 2011; Guzmán et al., 2003; Jaccard et al., 2000; Karofsky et al., 2001), the relation between parental communication frequency and adolescents’ attitudes and behaviors was nonsignificant when considered with all the other variables in the study. This, combined
with the importance of peer communication at the bivariate and multivariate level suggests implications for the importance of examining communication frequency with other relational and communication factors to fully understand adolescents’ experiences.

**Parent-child closeness.** Contrary to expectations and past research, the results of the present dissertation did not support the hypotheses suggesting that parent-child closeness was related to reduced risk in adolescents’ sexual attitudes and behaviors. Much of the previous research has shown that parent-child closeness is associated with lower levels of adolescent sexual risk-taking, including unprotected sex, multiple partners, and early sexual debut (e.g., Miller, 2002; Miller et al., 2001). Unlike the present study, however, much of the previous research has examined parent-child closeness utilizing parent-child dyads or college-age adolescents (Fox & Inazu, 1980; Jaccard et al., 2000; Martino et al., 2008). These unexpected findings may be explained in at least three ways. First, the nonsignificant relationship between closeness and reductions in risk may be due to the changes occurring in the parent-child relationship during adolescence in comparison with young adulthood. Although perceptions of the relationship usually remain supportive and pleasant, both adolescents and parents report a decrease in communicating positive emotions and an increase in communicating negative emotions when compared to preadolescence (Steinberg & Silk, 2002) and emerging adulthood. These decreases in general positive emotions may play a role in adolescents’ perceptions of parents’ closeness and/or closeness may not be relevant a factor in reducing an adolescents’ sexual risk.

Second, scholars warn that another limitation to collecting data from parent-adolescent dyads about sex-related topics is that parents and adolescents may positively
over-estimate closeness because their parent is present or they know their responses are connected to each other (Miller et al., 2001). However, the current study eliminated this potential response bias by collecting data from adolescents only. In the case of adolescents’ reports, closeness was not a significant predictor of risk.

Third, another explanation for these unexpected findings may be that the current study used a measure that was not used in prior studies on parent-child communication about sex. The Inclusion of Other in the Self, (IOS) is a single item pictorial measure used to capture adolescents’ perception of their parent-child closeness. Although this measure accounts for cognitive and emotional features of closeness compared to other measures (Aron et al., 2004) it has not been used to evaluate the relationship between closeness and adolescent sexual risk-taking and permissive attitudes (see Miller et al., 2001, for review). The relationship between parent-adolescent closeness using IOS and adolescents’ attitudes and behaviors should continue to be explored in future studies (Aron et al., 2004).

In summary, the findings from this current investigation fail to support decades of previous research regarding parent-adolescent communication frequency and parent-child closeness. From high school adolescents’ reports neither parental communication frequency about sex-related topics nor closeness play a significant role on permissive sexual attitudes or risky sexual behavior.

**Adolescents’ Perceptions Parent-Adolescent Communication**

In addition to understanding how previously established variables help to explain adolescent sexual risk-taking, the current study also set out to map new ground by capturing adolescents’ recollections of what parents say about sex-related topics (actual
conversations) and what adolescents wish their parents would say (ideal conversations). Understanding adolescents’ recollections of these conversations is important because it provides insight into what adolescents remember about what their parents say and into what types of conversations adolescents believe should be taking place with their parents. Based on the reasoning that adolescents who value their parents’ communication are more likely to be persuaded by it (Feldman & Rosenthal, 2000), the current study investigated not just what parents say, but how adolescents perceive what parents say. Thus, the current study also examined how these conversations related to the adolescent’s overall view of their parents’ communication competence and the potential those evaluations have for reducing risky sexual attitudes and behaviors. The following section highlights the findings and implications of adolescents’ perceptions of parent-adolescent communication about sex.

**Actual conversation themes.** Previous research on sex communication content typically focuses on emerging adult and parent recollections of sex-related topics, such as relationships, morals, pregnancy, abstinence, and dangers (Heisler, 2005; Lefkowitz et al., 2007). Although these adult perceptions of content add to the literature, no known study thus far had asked high school adolescents to describe a memorable parent-adolescent conversation about sex. Adolescents’ reports of the actual conversation themes (safety, underdeveloped/unsuccesful, warning/threat, no talk, and wait) provided a unique perspective of what adolescents remember most about parent-adolescent conversations about sex.

The results revealed that some parents have detailed conversations that span topics of relationships, safety, and emotions (e.g., comprehensive-talk), whereas others
focused more on one-dimensional conversations that highlight specific issues, such as, safety, warning/threat, or wait. Safety was the most prevalent theme that emerged from adolescents’ memorable parental conversations. Specifically, many parents had talked to their children about the importance of sexual safety by engaging in conversations about contraception, and protecting oneself from STIs and pregnancy. Given that almost sixty percent of the adolescents in this study had reported engaging in sexual intercourse, one implication for safety as a main theme may suggest that parents are aware that adolescents are sexually active (CDC, 2009). Because conversations about safety were more prevalent in the reports of participants than conversations encouraging children to wait (i.e., until marriage), parents may also understand the importance of educating their children about sexual safety over abstinence. The current study did not examine if the conversations were before or after sexual debut, but based on the prevalence of safety as a main theme, future research should examine whether or not parents are talking to their adolescent about contraception (e.g., condoms, birth control) before or after they become aware their child is sexually active. Previous research has found that parents underestimate adolescents’ sexual activities or they prefer not to acknowledge that they may become sexually active in the future (Bruckner & Bearman, 2003). Thus, by the time parents recognize their adolescent is sexually involved and feel the need to have conversations about sex-related topics, they may have missed the opportunity to delay the onset of sexual intercourse and decided to focus on encouraging safer behaviors since their adolescent is already sexual active (Eisenberg et al., 2005).

The prevalence of the safety conversation reported in the current study and the unexpected small number of wait conversations (n = 14, 9%) may reflect a cultural shift
away from abstinence only conversations. Indeed, researchers have found that abstinence only programs in schools have been unsuccessful in reducing adolescents’ sexual risk, and many schools have since moved to more comprehensive education programs that include how to talk about STIs/AIDs, contraception, and intimate relationships (e.g., Bleakley et al., 2009; DiCenso et al., 2002). These changes may also have an impact on the sex-related conversations within the family context. Parents may know their children are learning about sexual health in school and use that as an opportunity to discuss sexual safety at home. On the other hand, schools may adapt to the cultural shifts evident at home. These findings have implications for future research that explores the relation between school based sex programs on parent-child sex talks.

Despite the fact that some adolescents reported having conversations about a variety of sex-related topics, based on the current study’s findings many parents still seemed to shy away from these conversations. Similar to previous studies, almost forty percent (n = 53) of adolescents reported that their parents had said little (e.g., underdeveloped/unsuccesful) or nothing (i.e., no talk) to them about sex-related topics (Eisenberg et al., 2005; Jerman & Constantine, 2010). These findings are alarming in light of previous findings that frequency of parent-adolescent communication reduces adolescent sexual risk (e.g., Booth-Butterfield & Sidelinger, 1998; Guilamo-Romos et al., 2011; Guzmán et al., 2003; Huebner & Howell, 2003; Jaccard et al., 2002; Karofsky, Zeng, & Kororok, 2001). The prevalence of underdeveloped communication suggests that parents may not only need help on what to say, but also how to initially engage in a conversation about sex.
Interestingly, none of the conversation types predicted differences in participants’ sexual risk-taking or permissive sexual attitudes. In other words, in the current study, certain types of talk were not directly more or less effective in explaining differences in adolescent sexual risk-taking or permissive sexual attitudes. It may be that more important than what actual conversations adolescents reported having with their parents is how adolescents perceived these conversations. Indeed, the current findings revealed that certain types of conversations were perceived as more effective than others, and these perceptions in turn helped to explain variations in risky attitudes and behaviors. In addition, certain kinds of conversations were seen as more or less ideal as evidenced by the cross-case data matrix analysis, which identified patterns between adolescents’ reported actual and ideal conversations. Therefore, the remainder of this section will discuss adolescents’ perceptions of their parents’ communication and the potential implications of these findings for future research and interventions.

**Perceptions of communication competence and effectiveness.** As other researchers have argued, it is likely adolescents’ perceptions of their parents’ communication about sex-related topics, rather than the parents’ perceptions of how they themselves communicated, is more important in predicting adolescents’ attitudes and behaviors about sex (e.g., Afifi et al., 2008; Guilamo-Ramos et al., 2006). In the current study, adolescents’ perceptions of communication competence were the most significant predictor in reducing adolescents’ attitudes and behaviors surrounding sexual risk. Adolescents’ perceptions of communication effectiveness were also significant in predicting decreases in adolescents’ permissive attitudes surrounding sexual risk. Indeed, when adolescents believed their parents demonstrated fundamental communication skills,
comfort, sincerity and that their messages about sex were helpful, they were less likely to condone those behaviors in their self-reported attitudes about sex.

Although the types of conversations adolescents reported having with their parents were not related to adolescents’ attitudes and behaviors about sex, adolescents did perceive conversation type differently in terms of competence and effectiveness. Specifically, parent-adolescent communication coded as comprehensive-talk was perceived by adolescent participants as significantly more competent and effective than all the other types of reported conversations, including safety, wait, underdeveloped, warnings, and no talk. In other words, conversations that covered various topics, such as, romantic relationships, safety, dating, emotions, parents’ personal experiences, and pressure to have sex were perceived as most effective compared to the other one-dimensional conversations. Conversations about safety and those that encouraged adolescents to wait (for love, marriage) were also viewed as significantly more effective and competent than the parents who said nothing (i.e., no talk). Thus, although comprehensive talks were regarded as superior to all other types, conversations that included sexual safety information or encouragement to wait were perceived as more successful than no conversation at all. This may seem intuitive, but the current findings support the idea that adolescents want their parents to talk to them about sex.

Interestingly, conversations characterized by warning/threats or those that were coded as underdeveloped/unsuccessful were not perceived as significantly more or less helpful or competent than no talk. In other words, even when parents attempt conversations, adolescents perceive failed attempts or empty threats with the same low levels of effectiveness and competence as if there was no conversation at all. Overall,
these findings suggest that parents who engage in more detailed conversation about sex-related topics, including sexual safety, emotions, and/or encourage adolescents’ to wait until ready or in a relationship, are perceived as a much more credible source than parents who say little or nothing. The implication for interventions is to develop and test these conversations to further understand the potential link between content and risky sexual attitude and behavior. The current study did not reveal a significant link between types and risk, but participants only reported on one memorable conversation. It may be that a series of multiple comprehensive conversations are necessary to reduce risk. Future research should test this possibility, using the current findings as a starting point to develop the content of training materials.

In addition to competence and effectiveness, the current study also examined adolescents’ perceptions of their parents’ communication about sex by asking them what they wish their parents had said. Understanding participants’ ideals can help to shed light on standards for family communication (Vangelisti, et al., 1999) in a way that may also be useful for interventions to improve parent-adolescent communication about sex.

**Actual and ideal conversation patterns.** Adolescents were asked how, if at all, they would change the conversation to be more ideal. *No change, be more specific/provide guidance, talk to me, collaborate, and appropriateness* emerged as the five main ideal conversation themes. In general, these findings provided insight into what conversations adolescents find important in helping them make sense of sexual relationships and health. Overall, adolescents wanted the parents to *provide more* – more conversations, more details on sexual health and safety, more listening and less lecturing, and more awareness on what is, and is not, appropriate. In particular, some adolescents
urged their parents to talk to them and encouraged them to not be afraid of bringing up
the conversation, no matter how uncomfortable or awkward it may be. Other adolescents
wanted their parents to be more specific, including talking to them about romantic
relationships, different kinds of contraception, and talking about parents’ own
experiences growing up. Adolescents also mentioned the significance of being
appropriate in the conversations (e.g., finding the right time and place, avoid doing it
around other people) and being allowed to ask their parents questions or express concerns.
It was clear that adolescents did not want their parents to shy away from these often
difficult and uncomfortable conversations. The ideal themes demonstrate that adolescents
wanted them to take the time and help them understand sex.

Importantly, over half of the adolescents (n = 84, 64.7%) described no change as
the most prominent theme. This finding suggests that many adolescents perceived the
conversation with their parents as ideal and/or acceptable. As previous research has noted,
many parents may feel uncomfortable or nervous about talking to their children about
sex-related topics (Jerman & Constantine, 2010), but these findings may help ease
parents’ concerns and hopefully convince them of the positive impact conversations (e.g.,
comprehensive-talk, safety, wait) may have on adolescents’ view of them as
communicators.

To better understand which participants were satisfied with their parents’
communication and how participants would change some types to become more ideal, the
current study also explored if patterns existed between actual and ideal conversations. As
displayed in Table 6, five predominant patterns emerged including, comprehensive-talk
→ no change, underdeveloped/unsuccessful → be more specific/provide guidance,
safety \rightarrow no change, safety \rightarrow be more specific/provide guidance, no talk \rightarrow talk to me. As expected, based on the adolescents’ competence and effectiveness ratings, adolescents who reported a comprehensive-talk also reported that no change could make the conversation ideal. In other words, adolescents whose parents had a conversation that involved topics of relationships, safety, emotions, personal stories, and dealing with pressure were content with the conversation and would not change anything about it to make it “ideal.” Indeed 8.7% of adolescents who described a comprehensive talk also said they would change nothing about the conversation. These adolescents clearly appreciated the degree to which their parents were informative, supportive, and detailed.

On the other hand, underdeveloped/unsuccessful \rightarrow be more specific/provide guidance and no talk \rightarrow talk to me also emerged as prevalent patterns. These patterns demonstrated that many adolescents who received little to no conversations about sex-related topics desired more. These adolescents commonly made statements on how they wished their parents would just talk to them about sex or provide more than just basic information. In addition, safety \rightarrow no change and safety \rightarrow be more specific also emerged as patterns. Upon further examination of the qualitative data, it became apparent that adolescents who reported safety \rightarrow no change described detailed conversation about their parents talking to them regarding how to use contraception and explained how they could get STIs/AIDs or pregnant if they were not careful. Others with this pattern discussed how their parents talked to them about general safety and acknowledging that they can always come to them if they wanted to get on birth control or needed condoms. However, safety conversations were more general and/or vague for adolescents with the pattern safety \rightarrow be more specific. Adolescents with this pattern described more general
conversations about safety and how parents said they hoped that they would be safe if/when they decided to become sexually active. In describing their ideal conversation, they encouraged parents to go beyond the general and provide additional detail and guidance.

**Summary.** Collectively these findings have some powerful implications for researchers and parents. First, what parents say plays a significant role on adolescents’ perceptions of parent credibility on sex-related topics. Second, similar to previous research (e.g., Feldman & Rosenthal, 2000) adolescents tended to base their perception primarily on the communicative behaviors of their parent. These findings provide a foundation for translational research for creating programs based on adolescents’ actual and ideal conversations. For example, a program designed around adolescents’ reports of ideal and actual conversations could teach parents about adolescents’ thoughts and feelings surrounding the sex talk, thereby helping them be more prepared and effective. Future research should continue to tease out the role of content in the parent-adolescent “sex talk” and its link to adolescents’ perceptions of effectiveness in order to develop interventions to help parents engage in comprehensive-talk conversations.

In summary, parents may be embarrassed or uncomfortable to talk to their adolescent about sex, but the current findings indicate that adolescents want their parents to engage in meaningful, trustworthy, and detailed conversations instead of offering vague statements or threats. The implication of these qualitative findings further suggests that adolescents want their parents to talk to them and, more importantly, provide details and guidance as they navigate through adolescence and make decisions regarding sex.
**Family Communication Climate**

To further assist adolescents as they navigate decisions related to sexual risk-taking and attitudes another primary interest in this study was to understand how family climate – as operationalized by family communication patterns – related to adolescents’ perceptions of parent-adolescent communication about sex. Limited research has examined the role FCP patterns play on adolescents’ sexual attitudes and behaviors. Addressing the overall family communication climate (e.g., conversation and conformity orientation) was important to acknowledge if/how different FCP dimensions may explain different types of communication and different perceptions of effectiveness. It was expected that FCPs would play a prominent role in adolescents’ perceptions of parent-adolescent conversations because certain patterns of conformity and conversation orientation are likely associated with different approaches to talking about taboo topics like sex. Also, because of this, FCPs would also probably help to explain adolescents’ perceptions of communication competence or effectiveness.

Despite these expectations, FCPs were unrelated to the types of conversations adolescents reported, nor did FCPs moderate the relationship between types of conversations and perceptions of competence and effectiveness. These findings could suggest that perhaps sex in and of itself is a topic that acts independent from the overall family communication environment. In a study on how various topics relate to FCP, Baxter and Akkoors (2008) have argued that conversation topics actually have conversation and conformity orientation features. In particular, they found parents and adolescents commonly reported low conversation orientation in relation to sex topics compared to other topics and that sex topic may be a difficult conversation in all family
environments. Baxter and Akkoor (2008) argued, that in terms of sexual topics “families will have to work harder in their communicative practices, rejecting or adapting normative expectations of how families ‘normally’ engage these matter (p.17).

Although sex-related topics may be a difficult conversation in many family environments, the discriminant function analysis revealed that some conversations might be more natural and prevalent in certain family communication climates. The analysis revealed that adolescents who reported coming from families high in conversation orientation and low in conformity orientation (i.e., pluralistic families) were more likely to report comprehensive-talk conversations with their parents than any other type of conversation. Based on Koerner and Fitzpatrick’s (2002, 2006) research and the present findings, perhaps families that encourage open communication about thoughts and ideas with little pressure to conform to parents’ perspectives are better equipped to engage in comprehensive-talk conversations.

Collectively the significant and nonsignificant findings highlight some important implications about FCPs in relation to adolescents’ perceptions of parent-adolescent communication about sex. First, in spite of the family FCPs, adolescents want their parents to talk to them about sex. Second, based on FCP research and theory, pluralistic families may be the best prepared to engage in comprehensive-talk and perhaps families that are high in conformity and low in conversation (i.e., protective) or low in conversation and conformity (i.e., laissez-faire) may best benefit from sex talk programs to help them better engage in open discussions about sex-related topics. In other words, comprehensive-talk should come more naturally to families that engage in open and detailed conversations where family members can freely share opinions with little
judgment (e.g., pluralistic) than families that engage in little talk and/or are expected not to question parental authority. Future research should continue to examine the family communication climate role in the sex talk and further investigate how family types (i.e., consensual, pluralistic, protective, and laissez-faire) may relate in developing family-based interventions.

Despite the contributions the current dissertation makes in expanding the understanding of parent-adolescent communication about sex-related topics, this study is only a first-step in a long-term endeavor. The results previously discussed should be interpreted within their limitations. Further, there are still many questions that remain unanswered about parent-adolescent conversations about sex. The following section acknowledges some of these limitations and offers suggestion for future research.

**Limitations and Future Recommendations**

Although the current study yields new and interesting results based on high school adolescents’ perspectives of the parent-child sex talk, limitations exist. First, recruitment and sampling could be improved. Due to the sensitive nature of these conversations it was difficult to obtain parental consent for their children to participate (Lefkowitz, 2002). Although the current sample size was adequate to run the proposed tests, a larger sample size should be collected in future research, as this would increase the power to lend more meaning to the results that approached significance. A larger sample would also allow for more complex data analysis techniques such as structural equation modeling (SEM), which could potentially provide a more complete and accurate account of the moderation effects and the family communication pattern variables within the model (Hayes, 2013; Kline, 2005). In addition to a larger diversity of participants should be considered,
because the main recruitment efforts occurred in the Midwest, participants were primarily Caucasian/White \((n = 93, 58.5\%)\), from rural and conservative locations (Nebraska: \(n = 137, 86.2\%\); Minnesota: \(n = 9, 5.7\%)\) and the majority of participants were Christian \((n = 100, 69.1\%)\). Future research should recruit adolescents from a wider variety of geographic locations in an effort to increase the diversity of the sample and allow for additional perspectives to emerge. Scholars could also further examine differences of adolescents’ sexual attitudes and behaviors based on ethnicity, gender, and parents education level. Despite this limitation, initial interventions could be designed and tested, particularly in Lincoln, Nebraska where most of the sample is from.

Second, although the focus of the study was on adolescents’ perceptions of parent-adolescent communication about sex, future research could get and compare both adolescents’ and parents’ perspectives on actual and ideal conversations, as well as perceptions of communication competence and effectiveness. Although some studies have evaluated both adolescent and parent perspectives on parents as sex educators (Feldman & Rosenthal, 2000) and the effects of parent-child sex communication on anxiety and avoidance tendencies (Afifi et al., 2008), more research comparing perspectives of actual and ideal conversations along with other measures would provide further support for creating more effective interventions. By comparing parents’ and adolescents’ perceptions, the discrepancies may help researchers understand the similarities and disconnect that occurs during these conversations. For example, comparing dyads in the same family would offer unique insight on what parents and adolescents view as ideal.
Third, the current findings are based on cross-sectional data. Longitudinal data are necessary to understand how adolescents’ perceptions of parent-adolescent communication, as well as their attitudes and behaviors, change over time. Research has found adolescents’ attitudes and behaviors dramatically change from early, middle, and late adolescence (Fisher, 2001). Longitudinal data would better inform how new experiences and behaviors (e.g., having sex for the first time) may change adolescent perceptions of parental messages.

Fourth, in terms of methodological limitations, data were collected using online self-report questionnaires. Even though the questionnaire included both Likert-type scales and open-ended questions eliciting narratives to gather detailed rich results, the self-report method could have biases, such as social desirability and limited human recollection. There are limitations to writing about experiences on surveys, as a researcher cannot ask follow-up questions or clarity the specifics in the content. Future research could combine in-depth interviews or observation with questionnaire methods. Triangulating methodologies including surveys, interviews, and observational data, would also provide a more complete picture of effective and positive strategies in reducing adolescent risk.

A fourth methodological limitation originated from the way adolescent sexual behaviors were measured. Specifically, adolescents were asked to respond “yes” or “no” to a series of questions about non-risky behaviors (e.g., kissing, hugging) and risky behaviors (e.g., unprotected sex, multiples partners) with risky behaviors carrying more weight. The original scale (Hansen, Paskett, Carter, 1999; Hansen, Wolkenstein, Hahn, 1992) used a matrix specific to Hansen et al.’s study and although Hansen (personal
communication, January 9, 2014) recommended the adapted matrix used in the current study, it has not yet been established as a consistent measure of behavior in other studies. Future studies could continue to use this scale, as well as, ask more about specific sexual risk behavior questions (e.g., if alcohol was consumed, if there was protection used, or sexual health history) to better capture adolescents’ risk behavior.

Despite the limitations of the present study, there are a number of strengths that provide a foundation for future research devoted to understanding the adolescents’ perspective as a way to help both parents and adolescents engage in meaningful conversations about sex and sexual health. The following sections outline some of the recommendations that emerged from the current study.

**Recommendations for Researchers and Future Implications**

In addition to the potential research recommendations discussed above, scholars need to continue focusing on adolescents’ perceptions surrounding sex-related topics to empower adolescents to make informed and healthy decision surrounding sexual risk. In order to expand our knowledge of parent-adolescent sex talk, research may also incorporate the lifespan and narrative perspective, as well as test translational interventions.

**Lifespan implications.** Framing this study around adolescent perspectives provides novel insight into what relational, family, and communication scholars emphasize as a crucial need – involving children’s perspectives in research (Miller-Day et al., 2013; Socha & Yingling, 2010). The findings of the current study affirm the notion that adolescents’ insights might be useful in creating interventions designed to promote adolescent sexual health and reduce sexual risk-taking. One way to continue to
understand and integrate the child’s viewpoint of family communication about sex is to embrace a lifespan approach to communication (Williams & Nussbaum, 2001) and examine how children’s perspectives of communication about sex-related topics change over time. Understanding how children make sense of puberty, intimate relationships, and sexual health in different developmental periods such as childhood, adolescence, and emerging adulthood may better predict their attitudes and behaviors surrounding sexual risk. For example, a future study that emerges naturally from the current findings is a longitudinal study that examines both peer and parent communication messages (e.g., content, process) about sex-related topics from early adolescence to emerging adulthood. 

Based on the peer communication findings in the present study, understanding how peer and parent messages transform throughout adolescence may provide insight to what types of conversations reduce or increase sexual risk-taking and permissive sexual attitudes at different life stages.

Moreover, applying a lifespan approach scholars also could design studies that examine additional outside sources, including religion, media, and school influence from childhood to emerging adulthood to understand how parental communication interacts with sources at different developmental periods. Overall, a lifespan approach to communication could help parents know what to say, based on children’s perspectives at different stages of development. In addition to the lifespan approach, researchers should also evaluate parent-adolescent communication about sex through a narrative lens.

**Narrative sense-making implications.** Narratives and stories function to help individuals make sense of and organize difficult and uncomfortable experiences within the family (Bruner, 1990; Fisher, 1987). Building on the idea that narratives allow
individuals to make-sense of and organize their experiences, Koenig Kellas and Krasntuber Horstman (2014) developed a conceptual model called Communicated Narrative Sense-Making (CNSM) as an “empirical approach to understanding the ways in which narratives and storytelling affect and reflect individual and relational well-being in the family” (p. 77). This conceptual model emphasizes the “communicated nature” of stories and the critical role content and/or process may have on individuals’ decisions surrounding topics like risk behavior and overall well-being (Koenig Kellas & Kranstuber Horstman, 2014). Given that adolescents in the present study perceived the comprehensive-talk – which included parents’ personal stories – as most effective, more research using narrative framework is warranted. Future research on parent-adolescent sex communication may build on the CNSM principles – including retrospective storytelling (influential stories people recall hearing), interactional storytelling (processes associated with telling stories), and translational storytelling (using narrative theories and research to create interventions) – to examine if and how parents use stories as a tool to teach lessons and make-sense of sexual attitudes and behaviors. For example, given the current findings it may be interesting to examine further how the content of stories adolescents remember hearing about sex (i.e., retrospective storytelling) relates to their sexual risk-taking and/or perceptions of parents’ communication. In an exploratory study on parents’ storytelling about sex-related topics, Holman (in progress) found that parents’ past experience stories and/or stories of “others” (e.g., friends, extended family members) personal experiences often helped emerging adults make sense of sexual safety and relationships. Applying these findings, as well as investigating parent-child interactional storytelling about sex in the future may inform interventions. If stories about
parents’ or “others’” personal experiences help adolescents make sense of sexuality and sex, stories and storytelling could be a key element to developing future interventions and translational storytelling (Koenig Kellas & Kranstuber Horstman, 2014) scholarship.

**Intervention and translational implications.** There were several results in the present study that have implications for researchers interested in designing interventions or translational research based on adolescent sexual risk-taking. Developing interventions based on adolescents’ perspectives that deal with medically accurate, age-appropriate, and easily accessible information seems critical (Guilamo-Ramos et al., 2011). Based on the actual and ideal patterns that emerged in the current study, adolescents want their parents to provide details about sexual safety, intimate relationships, personal experiences, and emotions related to sex. As a result, a clear translational implication is to use the actual and ideal accounts as the foundation for educational materials (e.g., brochures, short videos). For example, collaborating with individuals in media production to create trendy brochures or short public service announcement emphasizing the ideal conversation as a simple way to give parents access to the present studies results. These educational materials scripts and/or conversational guidelines for parents could be empirically tested, as well as implemented in future trainings for fostering collaborative conversations. Beyond continuing to see the adolescent and parent perspective, in an effort to design such interventions, researchers should also partner with local clinics and schools to best develop intervention and translational materials and procedures.

Partnering with health care professionals (e.g., physician, nurses) could assist in the development of intervention materials that include accurate sexual health information to better prepare parents to talk about details surrounding STIs/AIDs, pregnancy, and
contraception with their adolescents. In addition, partnering with local clinics may offer opportunities for future clinic-based interventions. Because many schools require mandatory yearly physicals to enroll in each academic year, local clinics may be a key location to implement a parent-based intervention (Guilamos et al., 2011). Parents that accompany their adolescents to their appointment could have an opportunity to participate in an intervention study that is developed based on adolescents’ ideal conversations and what conversations they found most effective. These interventions could include giving parents a packet containing reference, a short educational video – based on adolescents’ ideal conversations findings, and family activities to do in the clinic or take home and use with their adolescent children.

Another translational approach would be to partner with schools and collaborate with health and/or family consumer science teachers to develop brochures, online resources, or interactional training programs for parents to be tested in various intervention strategies to see which training is most effective. Testing the various intervention strategies (e.g., brochures, videos) should yield effective materials that could be distributed to schools. With many school districts moving to web-based portals where parents can check school announcements, grades, classroom information, newsletters, as well as easily message their child’s teachers, it is possible for teachers to easily communicate classroom related information to parents via multiple communication channels (e.g., computer, phone, tablet). Many of these portals have “resources for parents” and to help parents feel more prepared and competent when talking about sex-related topics, materials (brochures, videos, and local resources) based on adolescents’ perspectives could be uploaded for parents to access. For example, much of the materials
will include recommendations for parents that are discussed in more detail in the following section.

**Recommendations for Parents**

This final section provides two general recommendations for parents to use when communicating with their children about sex-related topics. These recommendations are based on the results from this study – which as discussed is limited by geography and convenience sampling. However, these recommendations are also as supported by previous research (e.g., Beckett et al., 2010; Jerman & Constantine, 2010; Lefkowitz & Hernandez, 2007) and are offered in the spirit of translation to the population who may be most invested in the results.

**Be prepared, informed, and confident.** The link between adolescents’ perceptions of communication competence and effectiveness and reduced risk emphasizes the importance of parents’ preparedness. Based on the ideal conversation themes adolescents urged parents to stop being afraid and talk to them. Many adolescents made statements encouraging their parents to talk about sex-related topics and some even acknowledge that it would “be uncomfortable” or “awkward” but talk to them anyway.

No parent needs to be an expert on what to say about sex to have a meaningful conversation with his or her child(ren). In the current study, many of the conversations that were perceived as most effective included parents sharing their personal experiences surrounding sex and relationships while growing up. Although it does take more forethought, if parents can better educate themselves on sexual safety, as well as share their personal experiences in relationships, they may have a better chance of being perceived as a credible source on sexual relationships. Although these suggestions may
be intimidating for many parents, knowledge and confidence during these conversations may not only help with perceptions, but may also establish open and mutual communication in the future. Research shows that adolescents are more comfortable initiating conversations about sex when they are satisfied with past parent-child communication about sex (Miller et al., 2001).

If parents engage in meaningful conversations that include issues of relationships, safety, emotions, (i.e., comprehensive-talks) and allow for adolescents to ask questions and share opinions (i.e., collaborate), adolescents may be more likely to understand sexual health and relationships and respect parents as credible sources of information and guidance. For example, based on adolescents’ descriptions of actual and ideal conversations they want their parents to provide more guidance and be more specific about sexual safety, relationships, or reasons why they should wait. Many adolescents wanted their parents to talk to them about how to get access to and/or use protection (e.g., condoms, birth control) if/when they decide to engage in sexual activity. Others wanted their parents to share more of their own personal experiences and struggles as they made decisions in intimate relationships. Overall, parents need to overcome their fear of the “sex talk,” share personal experiences, and remember to keep the conversation open, honest, and allow for their adolescent to ask questions.

**Communicate, be specific, and make it a two-way conversation.** Some research has found that parents fear that talking about sex-related topics or sharing their personal experiences with their children will lead to increased sexual interest or promiscuity (Jerman & Constantine, 2010). However, as the results of the current study indicate adolescents perceived detailed conversations about safety, emotions, and
relationships (i.e., comprehensive-talk) as the most competent and effective, thus reducing their risky attitudes and behaviors. Likewise, be more specific/provide guidance and talk to me, were two of the most common themes adolescents reported in the ideal conversations. As a result it seems that adolescents want their parents to talk to them about sex-related topics. Adolescents need a lot of guidance and information about sex-related topics, even if they often seem uninterested in their parents’ thoughts; many in this current study want their parents to talk to them. Despite the fact that many adolescents want more details and guidance during the conversations, they also encouraged their parents to engage in more collaborative conversations where adolescents can freely ask questions and express their opinions without repercussion.

In addition, if parents are not talking to their children about sex, adolescents will get their sexual information elsewhere. Based on this study and others (e.g., Lefkowtiz & Hernandez, 2007) peers will most likely be their source of sexual socialization. Indeed, in the current study, peers emerged consistently as significant predictors at the bivariate and multivariate level as among the most significant predictors of sexual risk-taking and permissive attitudes. Although talking with adolescents is often a difficult and uncomfortable undertaking, parent-adolescent conversations may reduce adolescent dependency on peers and other outside sources. These key recommendations provide the groundwork to develop educational brochures for parents, online recourse, videos, and future interactional interventions that can better support parents as they prepare to talk to their adolescents about sex-related topics.
Conclusion

Overall, the present study extends the literature on family communication about sex by examining adolescents’ perceptions of what their parents say, what types of conversations adolescents perceive as effective and competent, and how those parental conversations relate to sexual risk-taking and permissive attitudes within the larger family climate. Results of this study suggest that the quality of the parent-adolescent conversation about sex, specifically perceived parental communication competence and effectiveness, are particularly important in adolescents’ attitudes and behaviors surrounding sexual risk. Therefore, designing and implementing interventions to help parents positively talk to their children about sex may work to reduce adolescents’ susceptibility to STIs/AIDS, teen pregnancy, and/or emotional problems.

Despite over thirty years of research dedicated to understanding parent-child communication about sex-related topics, there is still much to learn. As the current dissertation demonstrates, an adolescent perspective is foundational in developing and implementing parent-child community based interventions about sexual health and relationship to help parents and adolescents in the 21st century. Ultimately the hope is that parents feel better prepared to engage in these conversations that can help their children make healthy decisions surrounding sexual attitudes and behaviors. As a whole, these findings based on the adolescent perspective provide researchers and parents insights into more effective ways to engage in parent-child conversations about sex.
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APPENDIX A: SCHOOL RECRUITMENT LETTER

School Recruitment Letter
Study on Conversations about Sex, Puberty, Relationships, and Sexual Health During Adolescence

Dear Principal:

My name is Amanda Holman and I am currently a Ph.D. candidate in the Department of Communication Studies at the University of Nebraska-Lincoln. Under the supervision of my advisor, Dr. Jody Koenig Kellas, I am currently working on a research study for my doctoral dissertation that examines adolescents’ perception of parent-child communication about sex. Communicating about sex and having the “sex talk” is difficult for many parents. I am interested in designing interventions that help parents talk to their children about sex effectively, but first I need to know what adolescents think about the ways in which their parents talk to them about sex, puberty, relationships, and sexual health during adolescence. I am writing to you in hopes that you will be interested in hearing more about this project and to see if you might be willing to let me recruit high school juniors and seniors (age 16-18) students from your school to participate in this study. I am aware of the importance of minimizing risks to students, the importance of instructional time, and the importance of not over taxing you, your staff, faculty, or students. Therefore, I am willing to work with you on an individual basis in order to develop a recruitment plan that will be safe for your students and least invasive to instructional time as possible. Students will complete this survey online, on their own time outside of school hours.

Below I have provided you with some general information about the study, which includes:

Purpose of the Study: As mentioned above, parent-child communication about sex can be difficult or uncomfortable for many parents and children. As such, the purpose of this study is to gain a better understanding of what type of messages about sex adolescents find helpful, particularly as they relate to minimizing risky sexual behavior. To create interventions for parents that help them effectively talk to their children about sex I first need to know what adolescents think about conversations regarding sex, puberty, relationships, and sexual health during adolescence. I am interested in adolescents’ opinions of parent-child communication about sex and what is most helpful (or unhelpful) in these kinds of conversations.

To be included in the study, adolescents must meet the following criteria:

- Adolescent must be between the ages of 16 and 18 years old.
- Adolescent must be willing to fill out a questionnaire which includes questions about how his/her parent/parents or legal guardian/guardians have talked (or not talked) to you about sex.

Benefits of Participating:
• **Participants:** Participating in the study may be beneficial for both the parent and child. The child will have a chance to think about conversations regarding sex, puberty, relationships, and sexual health during adolescence and what type of communication with parents helps them understand intimate relationships and avoid risky sexual behavior. It allows for a space for adolescents to express what is helpful/unhelpful in having the “sex talk”.

• **Parents/Guardians:** This study will benefit parents/guardians of an adolescent because I will create a pamphlet with information that focuses on helping parents/guardians talk to their child about sex based on the studies general findings. Moreover, the findings of this study will be used to plan and empirically test communication interventions for parents/guardians.

• **Schools:** I am also willing to share my findings with staff at schools (e.g., mail pamphlets to the school counselor or nurse to have on hand if parents come to them with questions/concerns on how to talk to their children about sex).

**Recruitment:** I am willing to work with you on an individual basis that works for you, your staff, the students, and your school policies. Some of the recruitment strategies may include visiting health classes and/or home rooms to announce the study (see school recruitment script attached), posting the study details for parents/guardians to read on the school website, and/or sending recruitment script with information about the study home with students. As previous mentioned I am willing to work with you and your schools policies on this recruitment process.

**Online Survey for Adolescents:** The study is completed through an anonymous online-survey that will take approximately 30 minutes to complete. Adolescent participants may take the survey in the privacy of their own home.

**Risks and/or Discomfort:** Risks for taking part in this study are minimal. There is a chance the participant may feel uncomfortable talking about sex or the “sex talk.” I have taken steps to eliminate these risks for participants by ensuring that the participant’s responses will be anonymous, and will emphasize that participants do not have to answer any questions that makes them feel uncomfortable and can discontinue participation at any time with no penalties. If the participant should feel uncomfortable or upset during or after completing as a result of participation, he/she can contact the National Alliance on Mental Illness (1-800-950-6264) or info@nami.org, which is a free information helpline that provides information, referrals, and support. Participants will also be aware that they have access to their school counselor if they need to talk.

**Compensation:** The participant is given an option to list his/her email address to receive an e-gift card for one song download from Amazon (amazon.com). The information will not be shared or retained in anyway, and will only be used to email them the Amazon e-gift card. The participant will receive the e-gift card within a week of completing the online-survey.
If you are interested in hearing more about the study and are interested in allowing me to recruit in your school please feel free to contact me by phone or email.

Sincerely,
Amanda Holman
Phone: (218) 329-6889
Email: amanda.holman@huskers.unl.edu

Dr. Jody Koenig Kellas
Phone: (402) 472-2079
Email: jkellas2@unl.edu
Hi everyone! My name is Amanda Holman and I am a student at the University of Nebraska. I am here today because I am working on a study that explores what young people think of parent-child communication about sex. Communicating about sex and having the “sex talk” is difficult for many parents and adolescents. I am interested in designing interventions that help parents and kids more effectively talk about topics related to sex, such as puberty, relationships, or sexual health, but first I need to know what young people, like you all, think about these kinds of conversations with your parents. I am looking for volunteers who would like to help me.

What I am going to do now is give you some information about the study so that you can decide whether or not you would like to volunteer to participate in an online survey. One of the most important things to keep in mind is that you can only participate in the study if your parent or legal guardian gives you permission by completing the online-parental consent form. After I am done explaining the study, I will hand out information about the study to give your parent. On the handout there is a link to the parent/guardian consent form that your parents will need to read and electronically sign. Unfortunately, if your parent does not read and electronically sign the form, I can’t let you participate. **However, rest assured, your parent(s)/legal guardian(s) will NOT ever see your responses to the survey.**

So now let me tell you a little bit about the study. As I mentioned the study is on what adolescents’ think about conversations their parents may have had with them regarding sex, puberty, relationships, and sexual health. I am interested in **YOUR** opinion of parent-child communication about sex and what is most helpful (or unhelpful) in these kinds of conversations.

To be included in the study, you must meet the following criteria:
(1) You must be between the ages of 16 and 18 years old.
(2) You must be willing to fill out a questionnaire which includes questions about how your parent/parents or legal guardian/guardians have talked (or not talked) to you about sex.

You will complete the study by filling out an anonymous online-survey that will take you approximately 30 minutes to complete. Just so you know, *anonymous* means that the email address your parents provided will not be connected to your response and no one, not even the investigators will know who completed what survey. **Also, even if your parent(s)/legal guardian give his/her permission for you to fill this out, he/she will never see your answers.**
One really important thing I want to mention is that if you do decide to be in the study and if part way through of filling out the survey you decide that you don't want to be a part of the study anymore, it is completely fine if you want to stop. If there are any questions you don't feel like answering you don't have to. You won't be punished in any way. If you feel upset at all during completing the survey it is completely fine to stop and I will provide information of a free helpline that provides information, referrals, and support.

Anything that you report in the survey will be anonymous, meaning that none of your personal information (e.g. email address) will be connected to the survey that you complete and not even I will know who completed what survey. At the end of the survey you will have the option of providing your email address and this is only if you want to receive an e-card for one song download from Amazon (amazon.com) for participating in the study. You may choose to leave it blank. If you do provide your email address it will not be attached to your survey and your email address will be kept confidential, meaning that I will keep your email address private. I may present what I discover in a research article or at a research conference. However, I will not present the name of your school or any identifiable information (e.g. email address).

Now I am going to handout a parental recruitment script with the link to the parent/guardian consent form. I need you to take the form home and have your parents read it. If you and your parent decide that you can participate, your parent can use the link to read and sign their permission to allow you to participate. Once they have agreed and completed the consent form you will receive an email with a link to the assent form and the survey.

Those are the main points of what this study is about. What questions do you have for me?

Should you have any questions regarding your participation in this study, please feel free to contact Jody or myself. The information is on the recruitment script.

**Primary Investigator**
Amanda Holman, M.A.
Dept. of Communication Studies
University of Nebraska-Lincoln
P.O. Box 880329
Lincoln, NE 68588-0329
amanda.holman@huskers.unl.edu

**Secondary Investigator**
Jody Koenig Kellas, Ph.D
Dept. of Communication Studies
University of Nebraska-Lincoln
P.O. Box 880329
Lincoln, NE 68588-0329
Jkellas2@unl.edu
Dear Parents/Guardians,

My name is Amanda Holman and I am currently working on a study that explores what young people think of parent-child communication about sex. Communicating about sex and having the “sex talk” is difficult for many parents. I am interested in designing interventions that help parents talk to their children about sex effectively, but first I need to know what adolescents think about the ways in which their parents talk to them about sex, puberty, relationships, and sexual health during adolescence.

This research will be conducted through an online-survey that will ask your child questions about general family communication and relationships, perceptions of parent-child communication about sex, basic information about your child’s attitude pertaining to sex, puberty, relationships, and dating, and a few demographic questions. The survey takes approximately 30 minutes to complete and should be completed in a private and quiet room. At any time throughout the survey your child may choose not to answer any question(s) and he/she is free to exit the survey at any time that he/she does not feel comfortable. Your child will be assured that his/her responses are private and no one but the investigators will have access to them.

In order for your child to participate in this study he/she must meet the following criteria: (1) Adolescent must be between the ages of 16-18 years old. (2) Adolescent must be willing to fill out a questionnaire which includes questions about how his/her parent/parents or legal guardian/guardians have talked (or not talked) to him/her about sex.

If your child meets these two requirements, I invite you to read and sign the online consent form (link below), along with providing your child’s email address so I may send the assent form and survey for them to complete if they choose.

If your child agrees to participate, he/she will be given an option to list their email address to receive an e-gift card for one free song download from Amazon (amazon.com) to their email address. Your child’s email address will not be associated with his/her responses and will be kept confidential. The information will not be shared or retained in any way, and will only be used to email them the e-gift card. Upon emailing out all the e-gift cards, all participants’ contact information will be deleted. Your child will have the option of remaining anonymous, as they do not have to enter their email address for an e-gift card.

If you agree to permit your child to participate, please feel free to complete the informed consent at:
https://ssp.qualtrics.com/SE/?SID=SV_3WTkFq8sRSGZ7
Please copy and paste the link if clicking the link does not take you to the consent form.

Thanks for your consideration of agreeing to permit your child to participate in this study. If you have any questions about the study, please feel free to contact us:

Amanda Holman, M.A.  
amanda.holman@huskers.unl.edu

Jody Koenig Kellas, Ph.D  
Jkellas2@unl.edu
APPENDIX D: PARENTAL/LEGAL GUARDIAN CONSENT FORM – ELECTRONIC COPY

Parental/Legal Guardian Consent Form (IRB# 20130613510FB)
Study on Conversations about Sex, Puberty, Relationships, and Sexual Health During Adolescence

Dear Parents/Guardians:

My name is Amanda Holman and I am currently working on a research study for my doctoral dissertation that examines adolescents’ perceptions of parent-child communication about sex. Communicating about sex and having the “sex talk” is difficult for many parents. I am interested in designing interventions that help parents talk to their children about sex effectively, but first I need to know what adolescents think about the ways in which their parents talk to them about sex, puberty, relationships, and sexual health during adolescence.

In order for your child to participate in this study he/she must meet the following criteria:
(1) Adolescent must be between the ages of 16 and 18 years old.
(2) Adolescent must be willing to fill out a questionnaire which includes questions about how his/her parent/parents or legal guardian/guardians have talked (or not talked) to him/her about sex.

You are invited to permit your child to participate in this research study. The following information is provided in order to help you make an informed decision whether or not to allow your child to participate. If you have any questions, please do not hesitate to contact me or Dr. Jody Koenig Kellas.

Purpose: As mentioned above, parent-child communication about sex can be difficult or uncomfortable for many parents and children. As such, the purpose of this study is to gain a better understanding of what type of messages about sex adolescents find helpful, particularly as they relate to minimizing risky sexual behavior. To create interventions for parents that help them effectively talk to their children about sex I first need to know what adolescents think about conversations regarding sex, puberty, relationships, and sexual health during adolescence. I am interested in adolescents’ opinions of parent-child communication about sex and what is most helpful (or unhelpful) in these kinds of conversations.

Procedure: Your child will be notified of her/his rights as a research participant (see attached Minor Assent Form). The study is completed through an anonymous online-survey that will take your child approximately 30 minutes to complete.

Benefits: There are no direct benefits to you as a result of participating in this study except for a potential chance for your child to think about conversations regarding sex, puberty, relationships, and sexual health during adolescence and what type of communication with you helps them understand intimate relationships and avoid risky
sexual behavior. It allows for a space for adolescence to express what is helpful/unhelpful in having the “sex talk.” In addition, this study will benefit parents of an adolescent because I will create a pamphlet with information that focuses on helping parents talk to their child about sex based on the study's general findings. Moreover, the findings of this study will be used to plan and empirically test communication interventions for parents. At the end of this consent form you are given the option to provide your email address to be one of the first to receive a pamphlet with information to help you talk with your child/children about sex-related topics based on the study's general findings.

**Risks and/or Discomfort:** Risks for taking part in this study are minimal. There is a chance your child may feel uncomfortable talking about sex or the “sex talk.” I have taken steps to eliminate these risks for participants by ensuring that the participant’s responses will be anonymous, and will emphasized that participants do not have to answer any questions that make them feel uncomfortable and can discontinue participation at any time with no penalties. If your child should become uncomfortable or upset during or after completing/questions as a result of participation, he/she can contact the National Alliance on Mental Illness (1-800-950-6264) or info@nami.org, which is a free information helpline that provides information, referrals, and support.

**Confidentiality:** Your child’s survey answers are anonymous, meaning no one, not even the investigators know who completed the survey. At the end of this consent form you will be asked to provide your child’s private email address. This email address will not be linked to your child’s survey responses. All email address’ information will be kept on a password-protected computer and confidential by Dr. Koenig Kellas and myself, which means only we will have access to the email address. Once the study is completed all the email addresses will be deleted.

**Compensation:** Your child is given an option to list his/her email address to receive an e-gift card for one song download from Amazon (amazon.com). The information will not be shared or retained in any way, and will only be used to email them the Amazon e-gift card. Your child will receive the e-gift card within a week of completing the online-survey.

**Opportunity to Ask Questions:** Your child’s rights as a research participant have been explained to you. If you or your child has any additional questions about the study, please contact me at amanda.holman@huskers.unl.edu. If you have any questions about your child’s rights as a research participant that have not been answered by the investigators or to report any concerns about this study, you may contact the University of Nebraska-Lincoln Institutional Review Board (UNL IRB), telephone (402) 472-6965.

**Freedom to Withdraw:** Participation in this study is voluntary. You and your child can refuse to participate or withdrawal at any time without adversely affecting his/her or your relationship with the investigators or the University of Nebraska-Lincoln. Your decision will not result in any loss of benefits to which your child is otherwise entitled.
Please provide your child’s email address so that the investigators can email the assent form and survey to your child. Also, you may provide your email address if you would like to receive an electronic pamphlet on information about how to talk to your child/children about sex based on the general findings from this study.

Your child’s email address: _______________________________________

Your email address: ____________________________________________

YOU ARE VOLUNTARILY MAKING A DECISION WHETHER OR NOT TO ALLOW YOUR CHILD TO PARTICIPATE IN THE RESEARCH STUDY. YOUR CHILD WILL ALSO AGREE TO BE INCLUDED WITHIN THE STUDY BY PROVIDING ASSENT.

BY CHECKING THE “I AGREE” BUTTON BELOW THIS MEANS YOU HAVE DECIDED TO ALLOW YOUR CHILD TO PARTICIPATE AND HAVE READ AND UNDERSTOOD THE INFORMATION PRESENTED. PLEASE PRINT A COPY OF THIS FORM TO KEEP.

☐ I AGREE
APPENDIX E: ADOLESCENT ASSENT FORM

Adolescent Assent Form (IRB #2013061351FB)
Study on Conversations about Sex, Puberty, Relationships, and Sexual Health During Adolescence

Hello!
My name is Amanda Holman and I am a graduate student in the Department of Communication Studies at the University of Nebraska-Lincoln. I am currently working on a study about what young people think of parent-child communication about sex or the “sex talk” that your parents may have had with you. Communicating about sex and having the “sex talk” is difficult for many parents and adolescents. Specifically, I am interested in YOUR opinion of parent-child communication about sex and what is most helpful (or unhelpful) in these kinds of conversations.

Your parent or legal guardian has already signed a parental consent form, but you still get to decide if you want to volunteer to be a part of this study. You have the right to choose not to participate in this study. Even though your parent/legal guardian gave his/her permission for you to fill this out, he/she will never see your answers.

To be included in the study, you must meet the following criteria:
(1) You must be 16, 17, or 18 years old.
(2) You must be willing to fill out a questionnaire which includes questions about how your parent/parents or legal guardian/guardians have talked (or not talked) to you about sex.

If you meet the participation criteria, you may take part in this study by checking the “signature box” at the end of this form. Prior to volunteering, the following information is provided in order to help you make an informed decision whether or not to participate.

The purpose of this study is to understand what adolescents’ think about conversation their parents may have had with them regarding sex, puberty, relationships, and sex-related topics. I am interested in YOUR opinion of parent-child communication about sex and what is most helpful (or unhelpful) in these kinds of conversations.

To complete this online-survey please find a private and quiet place to fill-out the survey.

You will complete the study by filling out an anonymous online-survey that will take you approximately 30 minutes to complete. Just so you know, anonymous means that the email address your parent/legal guardian provided will not be connected to your response and no one, not even the investigators will know who completed what survey. Please know your parent(s)/legal guardian(s) will NEVER see your responses to the survey.

Benefits: There are no direct benefits to you as a result of participating in this study except potentially gaining a greater understanding about conversations regarding sex,
puberty, relationships, and sexual health during adolescence and what type of communication with parents helps you understand intimate relationships and topics related to sex. It allows a space for you to express what is helpful/unhelpful in having the “sex talk”. In addition, this study will benefit parents of an adolescent as I plan to design interventions to help parents effectively talk to their children about sex-related topics based on this study's general findings.

**Risks:** There is a chance you may feel uncomfortable talking about sex or the “sex talk.” You do not have to answer any questions that make you feel uncomfortable and may stop being a part of this study at anytime. If you feel uncomfortable or upset during or after completing this survey you can contact the National Alliance on Mental Illness (1-800-950-6264) or info@nami.org, which is a free information helpline that provides information, referrals, and support.

Remember your survey answers are anonymous, meaning no one, not even the investigators know who completed the survey.

**Questions:** You may ask any questions concerning this research and have those questions answered before agreeing to participate or after the study is complete. If you have any questions about this research project, please feel free to contact Amanda Holman or Jody Koenig Kellas by email. If you have any questions about your rights as a participant that have not been answered by the researchers or would like to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board, telephone (402) 472-6965.

**Compensation for Participating:** At the end of the survey you will be given an option to list your email address to receive an e-gift card for one song download from Amazon (amazon.com). The information will not be shared in any way, and will only be used to email you the Amazon e-gift for one music download. The email address will not be attached to your responses. You will receive the e-gift card within a week of completing the online-survey and it will be sent directly to your email.

You have the right to choose not to participate in this study and can stop at anytime.

**BY CHECKING "I AGREE" MEANS THAT YOU HAVE DECIDED TO PARTICIPATE AND HAVE READ EVERYTHING THAT IS ON THIS FORM. PLEASE PRINT A COPY OF THIS FORM TO KEEP.**

☐ I AGREE

Thanks,

**Primary Investigator**
Amanda Holman, M.A.
Dept. of Communication Studies

**Secondary Investigator**
Jody Koenig Kellas, Ph.D
Dept. of Communication Studies
APPENDIX F: PARENTAL/LEGAL GUARDIAN CONSENT FORM – PAPER COPY

Parental/Legal Guardian Consent Form (IRB# 20130613510FB)
Study on Conversations about Sex, Puberty, Relationships, and Sexual Health During Adolescence

Dear Parents/Guardians:

My name is Amanda Holman and I am currently working on a research study for my doctoral dissertation that examines adolescents’ perceptions of parent-child communication about sex. Communicating about sex and having the “sex talk” is difficult for many parents. I am interested in designing interventions that help parents talk to their children about sex effectively, but first I need to know what adolescents think about the ways in which their parents talk to them about sex, puberty, relationships, and sexual health during adolescence.

In order for your child to participate in this study he/she must meet the following criteria:
(1) Adolescent must be between the ages of 16-18 years old.
(2) Adolescent must be willing to fill out a questionnaire which includes questions about how his/her parent/parents or legal guardian/guardians have talked (or not talked) to him/her about sex.

You are invited to permit your child to participate in this research study. The following information is provided in order to help you make an informed decision whether or not to allow your child to participate. If you have any questions, please do not hesitate to contact me or Dr. Jody Koenig Kellas.

Purpose: As mentioned above, parent-child communication about sex can be difficult or uncomfortable for many parents and children. As such, the purpose of this study is to gain a better understanding of what type of messages about sex adolescents find helpful, particularly as they relate to minimizing risky sexual behavior. To create interventions for parents that help them effectively talk to their children about sex I first need to know what adolescents think about conversations regarding sex, puberty, relationships, and sexual health during adolescence. I am interested in adolescents’ opinions of parent-child communication about sex and what is most helpful (or unhelpful) in these kinds of conversations.

Procedure: Your child will be notified of her/his rights as a research participant (see attached Minor Assent Form). The study is completed through an anonymous online-survey that will take your child approximately 30 minutes to complete.

Benefits: There are no direct benefits to you as a result of participating in this study except for a potential chance for your child to think about conversations regarding sex, puberty, relationships, and sexual health during adolescence and what type of communication with you helps them understand intimate relationships and avoid risky sexual behavior. It allows for a space for adolescence to express what is helpful/unhelpful...
in having the “sex talk.” In addition, this study will benefit parents of an adolescent because I will create a pamphlet with information that focuses on helping parents talk to their child about sex based on the study’s general findings. Moreover, the findings of this study will be used to plan and empirically test communication interventions for parents. At the end of this consent form you are given the option to provide your email address to be one of the first to receive a pamphlet with information to help you talk with your child/children about sex-related topics based on the study’s general findings.

**Risks and/or Discomfort:** Risks for taking part in this study are minimal. There is a chance your child may feel uncomfortable talking about sex or the “sex talk.” I have taken steps to eliminate these risks for participants by ensuring that the participant’s responses will be anonymous, and will emphasized that participants do not have to answer any questions that make them feel uncomfortable and can discontinue participation at any time with no penalties. If your child should become uncomfortable or upset during or after completing the study/questions as a result of participation, he/she can contact the National Alliance on Mental Illness (1-800-950-6264) or info@nami.org, which is a free information helpline that provides information, referrals, and support.

**Confidentiality:** Your child’s survey answers are anonymous, meaning no one, not even the investigators know who completed the survey. At the end of this consent form you will be asked to provide your child’s private email address. This email address will not be linked to your child’s survey responses. All email address’ information will be kept on a password-protected computer and confidential by Dr. Koenig Kellas and myself, which means only we will have access to the email address. Once the study is completed all the email addresses will be deleted.

**Compensation:** Your child is given an option to list his/her email address to receive an e-gift card for one song download from Amazon (amazon.com). The information will not be shared or retained in any way, and will only be used to email them the Amazon e-gift card. Your child will receive the e-gift card within a week of completing the online-survey.

**Opportunity to Ask Questions:** Your child’s rights as a research participant have been explained to you. If you or your child has any additional questions about the study, please contact me at amanda.holman@huskers.unl.edu. If you have any questions about your child’s rights as a research participant that have not been answered by the investigators or to report any concerns about this study, you may contact the University of Nebraska-Lincoln Institutional Review Board (UNL IRB), telephone (402) 472-6965.

**Freedom to Withdraw:** Participation in this study is voluntary. You and your child can refuse to participate or withdrawal at any time without adversely affecting his/her or your relationship with the investigators or the University of Nebraska-Lincoln. Your decision will not result in any loss of benefits to which your child is otherwise entitled.

YOU ARE VOLUNTARILY MAKING A DECISION WHETHER OR NOT TO ALLOW YOUR CHILD TO PARTICIPATE IN THE RESEARCH STUDY. YOU
CHILD WILL ALSO AGREE TO BE INCLUDED WITHIN THE STUDY BY PROVIDING ASSENT (provided when given the survey). BY PROVIDING YOUR SIGNATURE BELOW THIS MEANS YOU HAVE DECIDED TO ALLOW YOUR CHILD TO PARTICIPATE AND HAVE READ AND UNDERSTOOD THE INFORMATION PRESENTED.

Parent/Guardian Signature: ________________________________

Child’s Name: ____________________________________________

**Primary Investigator**
Amanda Holman, M.A.
University of Nebraska-Lincoln
P.O. Box 880329
amanda.holman@huskers.unl.edu

**Secondary Investigator**
Jody Koenig Kellas, Ph.D
University of Nebraska-Lincoln
P.O. Box 880329
Jkellas2@unl.edu
APPENDIX G: ADOLESCENT SURVEY

Adolescent Survey

Below are a number of questions that I would like you to answer to the best of your ability and as completely as possible. The questionnaire should take approximately 30 minutes and I suggest finding a private and quite place to take this survey.

The purpose of this study is to understand what you think about conversations you parent(s) may (or may not) have had with you regarding sex. I am interested in YOUR opinion of parent-child communication about sex and what is most helpful (or unhelpful) in these kinds of conversations. Please answer the following questions as honestly as you can. Know that some of the questions may be a little uncomfortable to answer, however, I am interested in your opinions and so it is all right if you feel others may not agree with your answers. I want to know what you think and feel about the issues discussed.

Completing this survey is completely voluntary and your answers could help us better understand parent-child communication about sex. Remember, answers are completely anonymous, which means the email address your parents provided will not be connected to your responses and no one, not even the investigators will know who completed the survey. Even though your parent gave his/her permission for you to fill this out they will not see your answers.

For this study parent-child communication about sex may include a formal “sex talk,” or it can also be any time your parent may have had a conversation with you regarding sex. Please keep this in mind as you complete the survey.

A. Questions about Family and Friend Communication about Sex:

These questions are about how often you talk with your parent(s) and friends about sex.

1. Have you ever talked with your mom/maternal guardian about sex?  ____Yes  ____No
2. If so, how old were you when your mom/maternal guardian first talked to you about sex?________
3. Have you ever talked with your dad/paternal guardian about sex? ____Yes  ____No
4. If so, how old were you when your dad/paternal guardian first talked to you about sex?_____
5. Making your best guess, how many times have your parent(s) talked to you about sex?______ times
6. Have you ever talked with your friends about sex? ____Yes  ____No
7. If so, how old were you when you first talked to your friends about sex?_____
8. Making you best guess, how many times have your friend(s) talked to you about sex?
______ times

**Parent-Adolescent Communication Scale (PACS)**

<table>
<thead>
<tr>
<th>In your life, how often have you and your parent(s) talked about the following...</th>
<th>Never (0 times)</th>
<th>Rarely (1-2 times)</th>
<th>Sometimes (3-5 times)</th>
<th>Often (6 or more times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. …sex</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. …how to use condoms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. …protecting yourself from sexual transmitted disease (STDs)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. …protecting yourself from AIDs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. … protecting yourself from becoming pregnant</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. … the pros and cons of engaging in sex</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In your life, how often have you and your friends talked about the following...</th>
<th>Never (0 times)</th>
<th>Rarely (1-2 times)</th>
<th>Sometimes (3-5 times)</th>
<th>Often (6 or more times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. …sex</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. …how to use condoms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. …protecting yourself from sexual transmitted disease (STDs)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. …protecting yourself from AIDs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. … protecting yourself from becoming pregnant</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. … the pros and cons of engaging in sex</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
For this question please think about a time when your parent(s)/guardian(s) had a conversation with you regarding sex. Remember, this can be a formal “sex talk” or it could be any time your parent(s)/guardian(s) may have had a conversation with you regarding sex. If your parent(s)/guardian(s) have talked about sex more than once, try to remember the conversation that meant the most to you or is the most memorable. In other words, I’m interested in hearing about the conversation you remember most. This can be a conversation you had with your mom, dad, stepmom, stepdad, legal guardian or any combination of your parents. Specifically, recreate what your parent(s)/guardian(s) said to you about sex during the conversation and be as detailed as you can.

Who talked to you about sex in the conversation you wrote about above? (check all that apply)

___ No one talked to me
___ Mom
___ Dad
___ Legal Guardian ________________________________ please specify)
___ Mom &Dad/Legal Guardians together
___ Stepmom
___ Stepdad
___ Some other combination of my parents _____________________ (please specify)
Conversational Effectiveness Scale

Complete the following items about the conversation you just wrote about. Use the following scale to indicate your feelings about that specific conversation. There are no right or wrong answers. The scale ranges from 1 (strongly disagree) to 5 (strongly agree).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Slightly disagree</td>
<td>Undecided</td>
<td>Slightly agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

1. Our conversation was very beneficial.  
2. It was a useless conversation.  
3. It was a helpful conversation.  
4. My parent(s) was an unhelpful communicator(s).  
5. The conversation was very unrewarding.
Communication Competence Scale of Parents Discussion

Using these scales rate your parent(s)’ ability to listen and communicate his/her ideas in the conversation about sex you just explained above. Please answer the questions honestly. There are no right or wrong answers. The scale ranges from 1 (strongly disagree) to 5 (strongly agree). 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral (Don’t know), 4 = Agree, 5 = Strongly Agree.

1  2  3  4  5
Strongly disagree  Disagree  Neutral (don’t know)  Agree  Strongly agree

1. My parent(s) was a good communicator.
   1  2  3  4  5

2. My parent(s) was a good listener.
   1  2  3  4  5

3. My parent(s) solved problems during the conversation effectively.
   1  2  3  4  5

4. My parent’s communication was appropriate to the situation at hand.
   1  2  3  4  5

5. It was hard for my parent(s) to communicate his/her feelings clearly.
   1  2  3  4  5

If you could go back and redo the conversation you wrote about above, what do you wish your parent(s)/guardian(s) had said or done differently, if anything?

[Blank space for response]

If you could go back and redo the conversation you wrote about above, what do you wish your parent(s)/guardian(s) had said or done differently, if anything?
B. Questions about Family/Parent-Child Relationship and Communication

The Inclusion of Other in the Self Scale (IOS)

Please check the box under the picture that best describes your current relationship or how connected you feel with the parent(s)/guardian(s) you wrote about above.
The Revised Family Communication Pattern Instrument

The next set of questions asks about the general communication in your family. Please select the answer that best represents your family communication. The scale ranges from 1 (strongly disagree) to 7 (strongly agree).

<table>
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<tr>
<th></th>
<th>1</th>
<th>2</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Slightly disagree</td>
<td>Neither agree or disagree</td>
<td>Slightly agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

1. In our family we often talk about topics like politics and religion where some persons disagree with others.

2. My parent(s) often say things like "You'll know better when you grow up."

3. My parent(s) often say something like "Every member of the family should have some say in a family decision."

4. My parent(s) often say things like, "My ideas are right and you should not question them."

5. My parent(s) often ask my opinion when the family is talking about something.

6. My parent(s) often say things like "A child should not argue with adults."

7. My parent(s) encourage me to challenge their ideas and beliefs.

8. My parent(s) often say things like "There are some things that just shouldn't be talked about."

9. My parent(s) often say something like "You should always look at both sides of an issue."

10. My parent(s) often say things like, "You should give in on arguments rather than risk making people mad."

11. I usually tell my parent(s) what I am thinking about things.

12. When anything really important is involved, my parent(s) expect me to obey without questions.

13. I can tell my parent(s) almost anything.

14. In our home, my parent(s) usually have the last word.

15. In our family we often talk about our feelings and emotions.
16. My parent(s) feel it is important to be the boss.

17. My parent(s) and I often have long, relaxed conversations about nothing in particular.

18. My parent(s) sometimes become irritated with my views if they are different from theirs.

19. I really enjoy talking with my parent(s), even when we disagree.

20. If my parent(s) don't approve of it, they don't want to know about it.

21. My parents like to hear my opinion, even when I don't agree with them.

22. When I am at home, I am expected to obey my parent(s)' rules.

23. My parent(s) encourage me to express my feelings.

24. My parent(s) tend to be very open about their emotions.

25. We often talk as a family about things we have done during the day.

26. In our family, we often talk about our plans and hopes for the future.
Relational Satisfaction

For these questions continue to keep the parent(s)/guardian(s) that you wrote about above in mind throughout each question. Please respond by indicating the button that most closely describes your feelings towards your parent.

Miserable: 1 2 3 4 5 6 7 : Enjoyable
Hopeful: 1 2 3 4 5 6 7 : Discouraging
Free: 1 2 3 4 5 6 7 : Tied Down
Empty: 1 2 3 4 5 6 7 : Full
Interesting: 1 2 3 4 5 6 7 : Boring
Rewarding: 1 2 3 4 5 6 7 : Disappointing
Doesn’t give me much chance: 1 2 3 4 5 6 7
Lonely: 1 2 3 4 5 6 7 : Friendly
Hard: 1 2 3 4 5 6 7 : Easy
Worthwhile: 1 2 3 4 5 6 7 Useless

All things considered, how satisfied are you with your relationship with your parent(s)/guardian(s) that you wrote about above right now?

Completely Dissatisfied 1 2 3 4 5 6 7 Completely Satisfied
Neutral
C. Questions about Adolescent Sexual Knowledge, Attitude, and Behavior

For these sets of questions I will be asking you to talk about your knowledge, behavior, and attitudes towards sexual behavior. Please answer them honestly and know that your responses will remain anonymous and will not be shared with your parent.

1. Have you ever gone on a date? ____ Yes ____ No
2. Have you ever had sexual intercourse? ____ Yes ____ No
3. If you had sexual intercourse, how old were you when you had sex (intercourse) for the first time?
   _____ Years old.

Adolescent Sexual Activity Index (ASAI)

In your life, have you participated in the following behavior with a romantic partner?

1. Hugging ____ Yes ____ No
2. Holding hands ____ Yes ____ No
3. Spending time alone ____ Yes ____ No
4. Kissing ____ Yes ____ No
5. Cuddling ____ Yes ____ No
6. Laying together ____ Yes ____ No
7. Having someone put his or her hand under your clothes ____ Yes ____ No
8. Having put your hand under someone else’s clothes ____ Yes ____ No
9. Being undressed with sex organs showing ____ Yes ____ No
10. Engaging in unprotected oral sex ____ Yes ____ No
11. Engaging in unprotected sexual intercourse ____ Yes ____ No
12. How many times have you had sex in your lifetime?
    ____ 0
    ____ 1
    ____ 2
    ____ 3
    ____ 4 or more
13. How many different people have you had sex with in your lifetime?
    ____ 0
___1
___2
___3
___4 or more
Sexual knowledge and attitudes test for adolescents (SKAT-A)
(Attitude Subscale)

Below you will find a series of statements about sex. After reading each sentence decide the degree to think you agree or disagree. 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral (Don’t know), 4 = Agree, 5 = Strongly Agree.

1. Sex before marriage is morally wrong. 1 2 3 4 5
2. People should wait until they are married before having sex. 1 2 3 4 5
3. Sex between teenagers is NOT okay. 1 2 3 4 5
4. Sex is a normal part of growing up for teenagers. 1 2 3 4 5
5. Teenagers should be encouraged to remain virgins. 1 2 3 4 5
6. People should try to get as much sexual experiences as they can before they get married. 1 2 3 4 5
7. It is okay for teenagers to have sex. 1 2 3 4 5
8. Unprotected sexual intercourse is okay if you are dating the person. 1 2 3 4 5
9. Unprotected oral sex is okay if you are dating the person. 1 2 3 4 5
10. Unprotected sex between adolescents is NOT okay. 1 2 3 4 5
11. Having multiple sexual partners is okay. 1 2 3 4 5

12. On a scale from 1 to 10 how would you rate your views on sex? Check one.

<table>
<thead>
<tr>
<th>1</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservative</td>
<td>Middle of the Road</td>
<td>Liberal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. Questions about Peers

**Peer Models of Sexual Behavior Scale**

For these set of questions I will ask you to think about your friends’ behaviors.

<table>
<thead>
<tr>
<th>Thinking of your friends, how many of your friends engage in the following behaviors….</th>
<th>None</th>
<th>A few</th>
<th>About half</th>
<th>More than half</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. … kissing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. … cuddling</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. … fondling/touching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. … oral sex</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. … sexual intercourse</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
E. Basic Background Information about You

1. What is your current age (in years)? ____________

2. Your Sex (check one)  
   ___ Male  ___ Female

3. Sexual Orientation (check one)  
   ___ Heterosexual  ___ Homosexual  ___ Bisexual

4. What state did you grow up in? ________________________

5. What state do you currently live in? _______________________

6. What city do you currently live in? _______________________

7. Do you consider the city/town you grew up in rural or urban (check one).  
   ___ Rural (less than 50,000 people)  
   ___ Urban (more than 50,000 people)

8. Your Ethnicity (check one)  
   ___ African American  
   ___ Asian  
   ___ Caucasian  
   ___ Latino/a  
   ___ Middle Eastern  
   ___ Native American  
   ___ Other (please specify) ________________________________

9. What grade or year are you in school?  
   ___ 10th grade  
   ___ 11th grade  
   ___ 12th grade  
   ___ Freshman in College

10. The religion that influences you the most (check one)?
___ Protestant Christian
___ Roman Catholic
___ Evangelical Christian
___ Jewish
___ Muslim
___ Hindu
___ Buddhist
___ No religion
___ Other (please specify) ________________________________________

11. Apart from events such as weddings and funerals, how often does your family attend church?
___ More than once a week
___ Once a week
___ Once or twice a month
___ A few times a year
___ Never

12. What is the highest level of education your mom/maternal guardian has completed?
___ Elementary school only
___ Some high school, but did not finish
___ Completed high school
___ Some college, but did not finish
___ Two-year college degree
___ Four-year college degree
___ Some graduate school
___ Completed graduate or professional degree
___ Other (please specify)
13. What is the highest level of education your dad/paternal guardian has completed?

___ Elementary school only
___ Some high school, but did not finish
___ Completed high school
___ Some college, but did not finish
___ Two-year college degree
___ Four-year college degree
___ Some graduate school
___ Completed graduate or professional degree
___ Other (please specify)

14. How would you describe your parent(s)/guardian(s) political views?

___ Very conservative
___ Conservative
___ Moderate
___ Liberal
___ Very liberal
APPENDIX H: SURVEY LINK FOR COMPENSATION

Thank you for completing the survey!

For completing the survey you have the option to list your email address to receive a $2.00 e-gift card for the amount of one song download from Amazon (amazon.com).

Please know that your email address will not be linked to the survey you just completed and your email address will not be shared in anyway, and will only be used to email you the Amazon e-gift card. If you choose to list your email address you will receive the e-gift card within a week of completing the online-survey.

If you do not want to receive an e-gift card or list your email address just leave the space blank and click the "finish survey" button.

Email Address: _______________________________________________________

Thanks again for completing this survey,

Amanda

Amanda Holman, M.A.

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University of Nebraska-Lincoln
P.O. Box 880329
Lincoln, NE 68588-0329
amanda.holman@huskers.unl.edu
Parent-Adolescent REAL Conversation Themes: Conversation types adolescents report having with their parents about sex

Parent-Adolescent REAL Conversation Themes

1. **Safety**: messages that focus on being safe, cautious, and/or careful to avoid sexually transmitted infections (STIs), AIDS, and/or pregnancy. These messages include explicit concern for general sexual safety (e.g., “be safe”, “risks”) and the importance of using protection (e.g., condoms). These messages can also include worry about adolescents getting pregnant and open talk about using contraceptives (e.g. birth control pill, condoms) to prevent pregnancy.

2. **Comprehensive-Talk**: messages that cover multiple areas or topics related to sex. These conversations go beyond talking just about sex and also include discussions about intimate relationships, emotions/feelings, waiting, pressure to engage in sex, or personal stories. This can also include a sense of openness to discuss multiple topics about sexual relationships.

3. **Wait**: messages that directly encourage adolescent to wait. These messages emphasis waiting until marriage, in a committed relationship, the “right” person, or adulthood (e.g., “wait for the right one”, “sex is for people who are married”).

4. **Warning/Threats**: messages that express warning or dangers (e.g. “don’t be like your friend who is pregnant”, “you won’t be about to go to college.”) and/or threat (e.g., “it will ruin your life”, “don’t have sex or I will chop off your penis”, “I will be pissed”) when talking about engaging in sexual behavior, pregnancy, or STIs. These messages explicitly mention consequences if an adolescents engages in sexual behaviors.

5. **Underdeveloped/Unsuccessful**: messages that are underdeveloped (e.g. “my stepdad said wrap it up”) or too basic (e.g. “the old birds and the bees speech”, “puberty”) when discussing sex. This can also include parental messages that attempt to bring up sex-related topics but are vague or unsuccessful at having a clear point or meaning (e.g. “My mom told me what sex was, because I was learning about it in health class. Other than that we have never talked about it”, “she told me what is was like and how it worked, and that’s the memory I remember most because when she said vagina and penis it was like shock haha”). This can also include giving them sex educational materials (e.g., book, pamphlet) as a substitute for talking and/or not directly engaging in a conversation (“they gave me a book”).
6. **No Talk:** adolescents express their parents never had a direct conversation with them (e.g., “my parents never talked to me about it”) or state they talked to someone other than their parent about sex-related topics (e.g., friends, school, sibling).

7. **Uncodable**
Parent-Adolescent Ideal Conversation Themes: Conversation types/approaches/topics adolescents wished their parents would have done/said.

Parent-Adolescent IDEAL Conversation Themes

1. **Talk to Me:** Messages that express wanting their parents to talk to them about sex-related topics in an open, honest, and natural way. These messages include explicit statements of wanting their parents to have conversation with them about sex (e.g., “actually talk to me about sex”, “say something instead of nothing”, “take the time to talk”). These messages can also include statements about parents not being afraid to talk about sex-related topics or trusting their children can handle these conversations (e.g., “I’m not a little kid so trust that she could talk to me about the girl stuff with sex...”). Also, these messages may want parents to be more open or honest about sex during conversations (e.g., “be more upfront about it, and not be so subtle”, “why not be more open and honest with me”).

2. **Be More Specific/Provide Guidance:** Messages that focus on parents being more detailed or specific during the conversation. These messages include explicit statements of being more detailed or specific about sex-related topics (e.g., “inform me about the different types of birth control”, “diseases”) and going beyond the basics (e.g., “go beyond puberty”). These messages can also express wanting parents to provide more explanation(s), guidance, and more open-minded about sex-related topics. For example, messages that want parents to give reasons and/or talk about the pros and cons of sex (e.g., “explain the bad things and the good things about being sexual active”).

3. **Collaborate:** Messages that express the need for parents to make conversations about sex-topics more collaborative. For example, the need for parents to listen, ask, and answer questions during conversations about sex-related topics with their children (e.g., “let me talk more”, “I wish my mom would be more of a listener and answer questions rather than preach her view”). These messages can also include adolescents wanting their parents to ask them questions (e.g., “ask about how I felt”) and taking the adolescents’ perspective more during the conversation.

4. **Appropriateness:** Messages that highlighted advice in ways parents may change their behavior or approach when talking about sex-related topics. These messages can include parents’ changing their tone, emotion, who talks to them, and/or adolescents’ ages. For example, these messages may include parents controlling their emotions (e.g., anger, sadness) and being more prepared (e.g., “be less awkward”). These messages can also include suggestions of parental approach to sex-related conversations. For example, not having the “sex-talk” in public (i.e. with other people around) or having both (or just one) parents give the “sex talk.”
5. **No Change**: Messages that express *changing nothing* about the conversation they had with their parent(s). These messages may include explicit statements of “*nothing*”, “*no idea*”, or “*no*” with no further explanation. These messages can also include statements of changing nothing because their parents’ messages was done well and/or provided enough information from the adolescents’ perspective (e.g., “*I thought it was a good conversation*”, “*nothing, it really helped me and I want to wait*”) or that the parents would not be willing to change their approach/method (e.g., “*I don’t think they can say anything differently, their beliefs wont change and the topic of sex will never be a comfortable one*”).

6. **Uncodable**