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“Say something instead of nothing”: Adolescents’ perceptions of memorable conversations about sex-related topics with their parents

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Abstract

This study examined adolescents’ ($n = 389$) perceptions of parent- adolescent communication about sex, including what their parents say about sex, what types of conversations adolescents report as memorable, the degree to which messages are perceived as effective, and how parental messages predict adolescents’ sexual attitudes and behaviors. Six conversation types emerged: *underdeveloped*, *safety*, *comprehensive talk*, *warning/ threat*, *wait*, and *no talk*. When adolescents were asked to report how those could have been improved, five types emerged from the analysis of their responses: *no change*, *be more specific/provide guidance*, *talk to me*, *appropriateness*, and *collaborate*. *Comprehensive talk* and *safety* were perceived as significantly more effective than all other types of conversations. *Safety* conversations predicted the lowest levels of permissive sexual attitudes and risk-taking.

Keywords: Parent-adolescent communication, sex-talk, adolescent perspectives, memorable messages, communicated narrative sense-making, sexual health and risk-taking

Research consistently demonstrates that parent–child communication during adolescence about sex-related topics can greatly reduce risky sexual behavior during adolescence and adulthood (Guilamo-Ramos et al., 2012; Silk & Romero, 2014). In particular, adolescents who discuss dating, pregnancy, birth control, and/or sexually transmitted infections (STIs) with their parents are more likely to delay sexual debut (see Guilamo-Ramos et al., 2012 for a review), and once adolescents become sexually active, they are more likely to report using birth control (e.g., condoms) and having fewer sexual partners (Aspy et al., 2007). Despite these clear, positive outcomes of parent–adolescent communication about sex, many parents tend to avoid these conversations citing lack of information, embarrassment, and/or communication anxiety as deterrents (Elliott, 2010; Jerman & Constantine, 2010). Parents want to help their children understand important topics such as sexual health and relationships, but these anticipated conversations leave many parents uncertain and anxious about *what* to say and *how* to say it.

The majority of research that investigates parent–adolescent communication about sex has relied on the link between parents’ or young adults’ perceptions of frequency of communication and adolescents’ sexual behaviors (Guilamo-Ramos et al., 2012; Miller, 2002 for review). Although some research has demonstrated a positive relationship between communication frequency and reduced risk, there have been mixed findings on its contribution to adolescent behavior (Guilamo-Ramos et al., 2012). For example, when examined from the adolescent perspective, Holman and Koenig Kellas (2015) found that frequency was unrelated to sexual risk-taking, and some scholars have suggested that the frequency of sex-related conversations may be less important than the perceptions of the *content* or *style* of the communication (Holman & Koenig Kellas, 2015).

These mixed findings may be the result of participants’ perspective. Research suggests that parents and adolescents commonly have *different* perceptions of communication within the family (Sillars, 1998) and about what sex-related information is most important in understanding sexual relationships (Jerman & Constantine, 2010). Despite this, research tends to minimize adolescents’ experiences and position their knowledge and experiences as less valid than adults’

(Socha & Yingling, 2010; Thurlow, 2005). As a result, an adult-centric focus predominates the literature but may be insufficient for identifying what adolescents perceive as important in conversations with parents during the formative years of sexual development. We argue that in order to help reduce parent uncertainty, increase the effectiveness of parent-adolescent communication about risk, and reduce adolescent sexual risk-taking, research needs to spend less time on what communication *parents* believe is most effective and focus more effort on how *adolescents'* perspective of memorable sex-related conversations with parents relate to adolescents' own risk.

One way to do this is by examining the content of conversations that adolescents report as memorable, meaningful, and/or lasting. A communicated sense-making model (CSM, Koenig Kellas & Kranstuber Horstman, 2015) and communicated narrative sense-making theory (CNSM, Koenig Kellas, 2018) highlight the importance of message content, suggesting that memorable messages and storytelling in the family serve socializing and identity-building functions as well as predict individual and relational health. Grounded in these theories, the current study investigates memorable parent-child conversations about sex in order to understand the types of family communication about sex that adolescents recall as the most memorable and how they predict individual attitudes and sexual risk-taking. The goal is to investigate adolescents' perceptions of the parent-child sex talk by focusing on three fundamental features: (1) the content of memorable conversations adolescents report having with their parents; (2) the perceived effectiveness of parents' discursive strategies; and (3) the connections between conversation content, adolescents' perceptions, and adolescents' self-reported sexually risky behaviors and attitudes.

Sexual risk during adolescence

Understanding parent-child communication about sex is important given that adolescents are at high risk of negative sexual health outcomes. The United States has the highest rate of adolescent pregnancies in the developed world and adolescents constitute nearly half of the new cases of STIs each year (Centers for Disease Control and Prevention, 2013). Sexual risk in adolescence is a major concern in the

twenty-first century. Decreasing the number of teenage pregnancies and STIs and increasing the percent of early adolescents (ages 10–16) who remain sexually abstinent are major health goals for parents, educators, and health professionals (Guttmacher Institute, 2016).

Sexual attitudes guide individuals' assessments of sexual expressions, activities, and relationships (Guerra, Gouveia, Sousa, Lima, & Freires, 2012) and are often fostered first within the family (Lefkowitz & Stoppa, 2006). *Permissive sexual attitudes* have been defined as liberal values or beliefs surrounding premarital sex and more tolerance toward unprotected sex or multiple sexual partners (Hendrick & Hendrick, 1987) and *sexual risk taking* is defined as early sexual debut, having multiple partners, unprotected sex, and/or impairment from drugs or alcohol during sex (Holman & Sillars, 2011). Research has shown that permissive sexual attitudes and risk-taking are ameliorated by parent–child communication (Guilamo-Ramos et al., 2012), but research is still scant on message effectiveness, thereby limiting contributions it can make to parental intervention and dissemination.

The challenges of the parent–child “Sex talk”

Many parents want to play a critical role in educating their adolescent children about sex, but they doubt their knowledge, self-efficacy, and ability to be effective, particularly during their children's later adolescence (age 16–19) when many young people are engaging in sexual behavior (Guttmacher Institute, 2016). Parents report uncertainty about the appropriate times to discuss sexual attitudes and behaviors with their children and often keep the sex talk vague in early adolescence, only becoming more specific when they think their child is already sexually active (Beckett et al., 2010). In other words, many adolescents are not learning about critical information, like sexual safety, from their parents until *after* their sexual debut. Examining what adolescents view as helpful communication and understanding the ways such communication predicts lower levels of risky behavior is critical to advising and empowering parents to engage in parent–child communication prior to sexual debut in an effort to reduce adolescents' sexual risk-taking.

Adolescent perceptions of the parent-child “Sex talk”

Despite the call to include the voices of children in family communication research (Miller-Day, Pezalla, & Chesnut, 2013 for review) and that suggests adolescents are developmentally capable of discussing and evaluating topics of sexual behaviors and attitudes similar to adults (e.g., Moshman, 2011), few studies have examined the content of parent-adolescent communication about sex from an adolescent's perspective (cf., Afifi, Joseph, & Aldeis, 2008; Jerman & Constantine, 2010) or how adolescent perceptions of the helpfulness of these conversations relate to their attitudes and behaviors (cf., Beckett et al., 2010; Holman & Koenig Kellas, 2015). For example, in an observational study of parent-adolescent dyads, Afifi and colleagues (2008) found that adolescents' perceptions of their parents' communication effectiveness positively predicted the likelihood of discussing sex-related topics. This study builds on Afifi *et al.*'s (2008) research to better understand what parental messages adolescents view as most memorable and how these enduring conversations predict adolescents' sexual attitudes and risk-taking behaviors. We sought adolescents' perspectives *only*, in the current study, in order to better understand their unfiltered evaluation of parental communication and its links to their own sexual behavior.

Previous research supports the importance of examining adolescents' perceptions in order to develop strategies to reduce health risks. For example, Hecht and Miller-Day have spent over two decades developing and testing a substance abuse prevention curriculum (e.g., *keepin' it REAL*) that originated from the content of adolescent narratives about instances in which adolescents' successfully and unsuccessfully resisted drugs and alcohol (Alberts, Miller-Rassulo, & Hecht, 1991). This research identified prototypical strategies and then created preventive interventions to teach adolescents drug and alcohol resistance skills and its success stems from stressing adolescents' views of communication at the center of preventive interventions and dissemination (Hecht & Miller-Day, 2010, 2007).

In this study, we are similarly interested in gathering adolescents' perceptions of effective and in-effective parent-child communication about sex in order to design future interventions geared toward improving family communication and reducing sexual risk-taking.

Using empirical findings from research on individual and family storytelling to design and test interventions is the goal of CNSM (Koenig Kellas, 2018).

Theoretical perspective

CNSM theory is grounded in what Koenig Kellas and Kranstuber Horstman (2015) refer to as CSM. CSM scholarship examines the ways in which people communicate to make sense of their relational experiences by synthesizing research on constructs such as memorable messages, accounts, attributions, storytelling, and communicated perspective-taking and the connection between these communicative processes and well-being. Memorable messages, for example, are messages sent from important figures (e.g., parents) that – whether positive, negative, or neutral – endure and often impact values, behaviors, and/or beliefs (Knapp, Stohl, & Reardon, 1981). For instance, the memorable messages young adult children recall hearing from parents, have been associated with lasting effects on diet and exercise (Dorrance-Hall, Ruth-McSwain, & Ferrara, 2016) and perceptions of right and wrong (Waldron, Kloeber, Goman, Piemonte, & Danaher, 2014). Memorable messages give insight into family socialization and the lasting effect of family communication.

At the heart of CSM is storytelling or what Koenig Kellas and Kranstuber Horstman refer to as CNSM. CNSM theory (Koenig Kellas, 2018) examines the links between health/well-being and the memorable stories people hear and tell (retrospective storytelling), the processes by which interactants jointly construct stories (interactional storytelling), and interventions grounded in narrative theory and empirical results (translational storytelling). According to Koenig Kellas (2018), “The premise underlying the retrospective storytelling heuristic is that the stories we *hear* and *tell* can have significant lasting effects on our beliefs, values, behavior, and health. This is especially true in families” (p. 64).

In the present investigation, we asked adolescents to provide accounts (stories) of the most memorable conversation that they remember having with their parents about sex. We ground our investigation in CSM research on the lasting impact of memorable messages and CNSM theory’s proposition that such stories reveal individual,

relational, and intergenerational meaning-making, values, and beliefs (Proposition 1). By understanding the types of conversations adolescents recount having with their parents about sex, we gain insight into how adolescents make sense of parental communication and which conversations have a lasting impact. We therefore asked:

RQ1: What types of memorable conversations do adolescents report having with their parents about sex?

Adolescent perceptions of parents' effectiveness in reducing sexual risk

In order to better develop interventions for parent-child communication about sex, scholars need to understand not only the types of conversations adolescents recall as memorable, but also how they evaluate and respond to those conversations. We did so in three ways.

Memorable versus preferred communication. We were interested not only in what types of conversations adolescents recall, but also how what they heard compared to what they would have preferred their parents do or say. In a study focused on real and ideal family stories, Vangelisti, Crumley, and Baker (1999) found that by comparing stories of memorable family experiences with stories of how families "should" interact or behave gave insight into family culture and satisfaction. Understanding what adolescents would have added, changed, or omitted will help explain the ways in which adolescents make sense of and evaluate their parents' communication about sex. Thus, the second research question was posed:

RQ2: What types of conversations about sex do adolescents report as preferred (i.e., wish they had with their parent(s) about sex)?

Because some adolescents may be more satisfied with their interactions than others based on the type of communication they have with their parents, we also assessed patterns between memorable conversation story types and what they would have preferred. For example, adolescents who report the most memorable conversations with their parents as pertaining to abstinence might also describe

their preferred conversations as including more details about sexual safety or the pros and cons of having sex. At the same time, some adolescents may have no suggestions for the most memorable conversation because the discussion helped them make sense of sex and they perceived it as helpful. Knowing which types of memorable conversations correspond with no suggested changes (i.e., are seen as helpful or preferred) would offer information into the types of conversations adolescents value most. Therefore, we presented the following research question:

RQ3: What are the identifiable patterns between the memorable and preferred parent–child conversation types reported by adolescents?

Evaluating parental communication effectiveness. We also evaluated how effective adolescents perceived their parents' communication to be. Research shows that understanding how family members perceive content is just as important as the content of the conversation itself (Sillars, Smith, & Koerner, 2010). Importantly, children and parents tend to differ in their perceptions of *communication effectiveness* or the helpfulness of a conversation (Canary & Spitzberg, 1987) and this could relate to adolescents' sexual risk as well. For example, in one of the few studies that focused on both adolescents' and parents' evaluation of parents as "sex educators," Feldman and Rosenthal (2000) found that parents and adolescents tended to evaluate a successful sex talk very differently. 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 rather than the parents' intentions. Specifically, adolescents evaluated their mothers as good sex educators when they took the adolescents' needs into account and created a comfortable communication environment, whereas mothers who said little, acted judgmental, or avoided questions were perceived as much less helpful (Feldman & Rosenthal, 2000; Lefkowitz, Sigman, & Kitfong Au, 2000). In addition, Afifi et al. (2008) found that "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). In other words, no matter how well-intentioned the

parents are in their messages about sex, it is clear that the adolescents' perception of how their parents communicate matters.

Importantly, research has yet to examine the content of conversations adolescents recall having with their parents. Although, retrospective data is sometimes criticized for shortcomings such as self-report biases, CSM and CNSM (Koenig Kellas, 2018; Koenig Kellas & Kranstuber Horstman, 2015) focus directly on the memories that last because they illustrate the impact of family socialization, providing a proxy for what family communication "sticks" with children as they age and must act on the values, lessons, and behavioral guidelines communicated. Previous research on CSM and CNSM suggests that memorable message and stories are connected in meaningful ways with outcomes such as individual and relational health and perceptions of the family (e.g., Koenig Kellas, 2010). We expect, therefore, that the memorable conversations recalled by adolescents about sex will similarly predict variation in their evaluation of parents' communication effectiveness. This is important because the more a child perceives that his/her parent is competent in communicating about sex, the more likely the child might be to listen and heed the advice of his/her parents and reduce sexual risk. Consequently, we hypothesized:

H1: Adolescents' perceptions of parents' communication effectiveness in conversations about sex vary by memorable conversation type.

Links between memorable conversations and sexual risk. Finally, we investigated adolescents' evaluations of memorable conversations about sex by examining the possible links between conversation types and sexual risk-taking and attitudes. If, according to CSM and CNSM, memorable stories and conversations affect and reflect family socialization, enduring, socializing messages should help to explain – at least in part – adolescents' attitudes and behaviors toward sex and sexual risk-taking. Indeed, a central assumption of this body of theories is the link between family communication and individual health and wellbeing. Thus, we expect conversation type to predict adolescents' sexual risk. In order to help parents engage in effective communication about sex, informational scripts and guidelines should be produced to provide specific advice about what communication adolescents find most effective to help reduce risk. Developing such scripts

depends, in part, on empirically verifying connections between the content of parental messages and adolescent behavior. Thus, we posed the final hypothesis:

H2: Adolescents' self-reported (a) sexual risk-taking and (b) permissive sexual attitudes will vary by memorable conversation type.

Methods

Participants

Adolescent participants ($N = 389$) were recruited from six high schools ($n = 159$) and a large public university ($n = 230$) in the Midwest. The participants were an average of 17.41 years old ($SD = .81$, range = 16–19) and included adolescents in grades 10 ($n = 15$, 3.9%), 11 ($n = 66$, 17%), 12 ($n = 78$, 20.1%), and first semester college students ($n = 230$, 59.1%). Participants consisted of 274 females (70.4%) and 115 males (29.6%) with over 95% ($n = 372$) reporting heterosexual orientation. Participants identified their ethnicities as Caucasian/White ($n = 282$, 72.5%), African American ($n = 39$, 10%), Hispanic/Latino/a ($n = 27$, 6.9%), Asian ($n = 14$, 3.6%), Middle Eastern ($n = 9$, 2.3%), Native American ($n = 7$, 1.8%), and 11 (2.8%) people identified as multiethnic.

Of the 389 adolescents in the study, 59.9% ($n = 233$) indicated they had engaged in sexual intercourse – which was defined as involving penetration of the vagina by the penis. The average age for sexual debut was 15.73 ($SD = 1.47$) and there was no significant difference between males' ($M = 15.78$, $SD = 1.50$) and females' ($M = 15.70$, $SD = 1.46$) age of debut, $t(231) = .29$, $p = .13$. Participants reported having talked to their parents about sex on an average of 3.84 times ($SD = 3.83$).¹

Procedure

Adolescents between the ages of 16 and 19 were recruited for participation in an anonymous online questionnaire. It is during adolescence (ages 13–19) when many young people start to form their own sexual

attitudes and engage in sexual activity (Beckett et al., 2010). In order to maximize the likelihood that adolescents would recall parental messages about sex-related topics, as well as examine adolescents at the peak of making potential risky sexual decisions we prioritized the on-site recruitment of middle to late adolescents in high school. We also recruited college freshman, but we limited participation to first semester freshman because they are more likely to approximate the experience of late high school adolescents.

Before beginning data collection, the study was approved by each high school and the University's Institutional Review Board (IRB). Recruitment took place on-site in 22 local high school classes across six high schools in the Midwest as well as introductory classes at a large Midwestern university. If participants were 18 years old or younger parental consent forms were sent to parents. Once parental consent was received, adolescent participants were emailed a link to the online questionnaire containing an adolescent assent form and all measures.

The questionnaire included fixed-response items, Likert-type scales, and open-ended questions. To assess what conversations about sex adolescents perceive as memorable and the extent to whether 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 mom, dad, or both parents had a conversation with them regarding sex. The instructions read: *For this question please think about a time when your parent or parents had a conversation with you regarding sex. If your parent or parents have talked about sex more than once, try to remember the conversation that meant the most to you or is the most memorable.* After writing about the conversation, participants indicated which parent had the conversation with them (e.g., mom, dad, both, or other) and then rated their parent(s) on effectiveness in that particular conversation. Of the participants, 41 (10.8%) adolescents indicated in the text box that their parent has never had a conversation with them regarding sex and eight text boxes were left blank. Next, in order to assess what adolescent participants perceive as a *preferred* parent-adolescent conversation, participants were then asked what they wished their parent(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) had said or done differently,*

if anything? Finally, participants completed measures on adolescents' sexual risk-taking and permissive sexual attitudes. High school students were compensated with a gift card for one song download on Amazon.com and university students received course credit.

Measures

Communication effectiveness. A five-item parent's effectiveness subscale of the Conversational Effectiveness Scale (Canary & Spitzberg, 1987) was used to assess adolescents' perceptions of how effective their parents were in communicating with them about sex in the conversation they were referencing (e.g., *It was a helpful conversation, 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. Items were averaged to create an overall score ($M = 4.50$, $SD = 1.83$, $\alpha = .94$).

Sexual risk-taking. To assess adolescents' history of sexual risk-taking, the Adolescent Sexual Activity Index (ASAI) (Hansen, Wolkenstein, & Hahn, 1992) was adapted for use in this study. Participants were asked to respond *yes* or *no* to the question "In your life, have you participated in the following behavior with a romantic partner?" The original *yes* or *no* scale assessed ten behaviors with advancing levels of risk (e.g., hugging to engaging in sex). To be more specific to sexual risk-taking, we added the sex item (e.g., engaging in sex) to also include "engaging in *unprotected* sex" and added an oral sex item (e.g., engaging in *unprotected* oral sex) for this study. Based on Hansen's suggestion (personal communication, 9 January 2014), the original coding scheme was adapted such that lower risk behaviors (e.g., cuddling, kissing) were scored lower ($no = 1$, $yes = 2$) than higher risk behaviors (e.g., unprotected oral sex, $no = 1$, $yes = 4$; unprotected sex, $no = 1$, $yes = 6$). The scale also included two multiple choices items on the number of times they had sex in their lifetime (e.g., 0-4 or more) and the number of different sexual partners in their lifetime (0-4 or more); these two items were scored from one to five.² All 13 behaviors were summed to create a composite score of sexual behavior with higher scores indicating higher levels of sexual risk behavior ($M = 26.29$, $SD = 7.72$, range = 13-38, $\alpha = .81$).

Permissive sexual attitudes. A five-item premarital sex subscale of the Sexual Knowledge and Attitude Test for Adolescents scale (SKAT-A; Fullard & Scheier, 2011) was used to assess adolescents' attitudes about sexual risk-taking (e.g., *Sex before marriage is morally wrong*). Four additional items were added to emphasize risky sexual behaviors during adolescence (e.g., *Having multiple sexual partners is okay*). The Likert scale ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Five items were reverse coded and scores were averaged such that higher scores reflected more liberal attitudes toward premarital sex and sexual behaviors ($M = 2.76$, $SD = .84$, $\alpha = .89$).

Data analysis

To identify adolescents' most memorable and preferred conversations, 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., memorable conversations) and what adolescents wished their parents had said (i.e., preferred conversations) in parent-adolescent conversations about sex-related topics. Specifically, the authors read through all of the adolescents' responses describing the most memorable and preferred parent-adolescent conversations about sex and engaged in open coding (Miles, Huberman, & Saldana, 2014), independently devising an initial list of categories that characterized separately the memorable and preferred conversations. Based on this preliminary list of categories, an additional 20% of the data were reviewed, allowing thematic categories for most memorable and preferred to be redefined and/or collapsed as necessary. Specifically, coders examined the categories for thematic patterns of meaning (Braun & Clarke, 2006). Once the conversation types were established and agreed upon, negative case analysis (Bulmer, 1979) was used to ensure that all data were represented by the emergent coding scheme. Any data that were not captured by the initial set of categories resulted in the addition of new categories. The authors reconvened to discuss the refined set of conversation types. These steps resulted in a final list of seven types of most memorable and six types of preferred parent-adolescent conversations.

A codebook was created and two research assistants – unaware of the study hypotheses – practiced coding memorable and preferred

conversation types across 10% of the data over several practice sessions. Once coders were consistent, each research assistant independently coded adolescents' responses in sets of 100 to check for reliability and avoid coder drift. Cohen's Kappa across the entire sample indicated acceptable reliability for memorable ($k = .86$ – $.90$, coder agreement = 89%–92%) and preferred ($k = .85$ – $.88$, coder agreement = 88%–90%) types; all disagreements were resolved through discussion, and one final code was assigned.

Results

Adolescents' memorable and preferred conversation types

RQ1 asked what types of memorable conversations adolescents report having with their parents about sex. Inductive analyzes revealed six conversation types characterized the most memorable conversations about which adolescents wrote: *underdeveloped*, *safety*, *comprehensive talk*, *warning/threat*, *wait*, *no talk*. Almost half of the adolescents described that their parents talked to them about sexual safety or provided vague and basic information about sex (e.g., *underdeveloped*). Less commonly reported were conversations that covered multiple topics related to sex (e.g., *comprehensive talk*), warning or threats about consequences, and abstinence (e.g., *wait*). Because the conversations that adolescents reporting having with parents may not meet their needs, we also asked what types of conversations (i.e., content and approach) adolescents would have preferred (RQ2). Five conversation types emerged: *no change*, *be more specific/provide guidance*, *talk to me*, *appropriateness*, and *collaborate*. Definitions, frequencies, and examples of both memorable and preferred conversation types are presented in **Table 1**.

Table 1. Adolescents' memorable and preferred conversation types descriptions, frequencies, and examples.

<i>Types and Descriptions</i>	<i>n</i>	<i>%</i>	<i>M</i>	<i>D</i>	<i>B</i>	<i>Examples</i>
Memorable Types	375	98.4	204	49	81	
<p>Underdeveloped Conversations that participants perceived as too basic or vague in discussing a sex-related topic. These conversations were often short and/or underdeveloped in helping the adolescent make sense of sexual information. This type of conversation also included instances in which parents used sex education materials (e.g., books, pamphlets) as a substitute for directly engaging in a conversation.</p>	91	23.9	61	12	18	<p>"My dad just said don't have sex and that's it." (16 YOM, debut age: 15, partners: 1, unprotected sex: yes)</p> <p>"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." (16 YOF, debut age: 16, partners: 1, unprotected sex: no)</p>
<p>Safety Safety conversations focused on being safe, cautious, and/or careful to avoid contracting a STI and/or AIDS. The conversations focused on the concern for general sexual safety and the importance of using protection (e.g., condoms, birth control) to prevent STIs and pregnancy.</p>	82	21.5	53	11	18	<p>"My dad told me how to use a condom and that he wanted me to be safe if I decided to have sex." (17 YOM, debut age: 17, partners: 1, unprotected sex: no)</p> <p>"The conversation I most remember is about birth control and getting me on it so I would have less the risk of getting pregnant." (16 YOF, sexually abstinent)</p>
<p>Comprehensive Talk Conversations that covered multiple topics related to sex. The comprehensive talk included talking about the physical aspects of sex (e.g., puberty, sexual acts) but also included discussions about intimate relationships, emotions, and pressures associated with sex. Generally, conversations in this category included detailed descriptions of topics and/or stories parents shared about sex, relationships, emotions, and more.</p>	68	17.8	39	7	22	<p>"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 boyfriend 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 ..." (16 YOF, sexually abstinent)</p>

Table 1. Adolescents' memorable and preferred conversation types descriptions, frequencies, and examples. (continued)

<i>Types and Descriptions</i>	<i>n</i>	<i>%</i>	<i>M</i>	<i>D</i>	<i>B</i>	<i>Examples</i>
<p>Warning/Threat Conversations that focused on messages of warning, danger, and/or threat when talking about engaging in sexual activities. This conversation type included parents making general or personal threats to their child if they engaged in sexual behavior and equating sex with future negative consequences, rather than offering safe solutions.</p>	48	12.6	23	13	12	"Pretty much don't get pregnant because it will ruin your life and any future of going to college" (16 YOF, debut age: 16, partners: 1, unprotected sex: no). "Don't have sex or I will chop off your penis" (16 YOM, debut age: 14, partners: 2, unprotected sex: yes).
<p>Wait Conversations characterized by parents urging adolescents 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.</p>	45	11.8	28	6	11	"My dad just told me not to have sex until I'm married" (17 YOM, debut age: 16, partners: 1, unprotected sex: no). "My parents told me to wait until my boyfriend and I both felt ready. Sex is a big deal and it's important to be emotionally mature and invested in the relationship before making any decisions" (17 YOM, sexually abstinent).
<p>No Talk 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.</p>	41	10.8	â€œ	â€œ	â€œ	"My parents never talked to me about sex" (18 YOF, debut age: 16, partners: 1, unprotected sex: yes). "My parents have never talked to me about sex. I'm guessing they assume that I know about the subject" (18 YOM, debut age 15, partners: 2, unprotected sex: yes).
Preferred Types	360	98.7	213	60	87	
<p>No Change Adolescents reportedly would not change any aspect of these conversations.</p>	151	41.5	84	17	50	"Nothing, because I agree with what my parents said, they were really helpful and made me think about being safe" (18 YOM, debut age: 18, partners: 1, unprotected sex: no).
<p>Be More Specific/Provide Guidance Conversations types included explicit statements of providing more detailed information and/or guidance about sex-related topics.</p>	99	27.2	71	14	14	"I just wish she had talked to me about what sex was, the dangers, what dating is like and stuff like that" (16 YOF, debut age: 15, partners: 2, unprotected sex: yes).

Table 1. Adolescents' memorable and preferred conversation types descriptions, frequencies, and examples. (continued)

<i>Types and Descriptions</i>	<i>n</i>	<i>%</i>	<i>M</i>	<i>D</i>	<i>B</i>	<i>Examples</i>
<p>Talk to Me Adolescents expressed how they wanted their parents to talk to them about sex-related topics in an open, honest, and natural way. Participants often mentioned that parents should trust their children's readiness for such conversations and that talking communicated caring. These conversation types were different from be more specific/provide guidance as they highlighted the adolescent simply wanting their parent to say something (instead of nothing) about sex.</p>	43	12	15	21	7	<p>"Say something instead of nothing" (16 YOF, debut age: 16, partners: 1, unprotected sex: no).</p> <p>"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. Talk to me!" (16 YOF, debut age: 15, partners: 1, unprotected sex: yes).</p>
<p>Appropriateness Adolescents suggested that parents' conversations about sex may be more effective if they controlled their emotions and were more prepared before talking with their child.</p>	41	11.3	24	4	13	<p>"Maybe if they were a little calmer I would have listened more. They were so angry" (18 YOM, sexually abstinent).</p> <p>"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" (16 YOF, sexually abstinent).</p>
<p>Collaborate Adolescents expressed that parents need to listen more and ask more questions of their children during conversations about sex. This conversation type emphasized dialogue in contrast with the less desirable format of a parent lecturing his/her child.</p>	26	6.7	19	4	3	<p>"Let me talk more" (17 YOF, debut age: 16, partners: 1, unprotected sex: no).</p> <p>"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." (16 YOF, sexually abstinent).</p>

Note. M = mom, D = dad, and B = both parents. YOM = year-old male, YOF = year-old female. Debut age = age of sexual debut. Partners = Number of sexual partners reported. For memorable conversation types eight adolescent participants did not report on conversation and six adolescents' (1.5%) responses were coded as uncodable because the responses were unreadable and/or made no sense. The no talk conversation type did not include a breakdown by parent type because there was no conversation with a parent to report. For preferred types 25 (6.4%) conversation accounts were left blank and four adolescents' (1%) responses were coded as uncodable because the responses were unreadable or did not make sense.

Patterns between memorable and preferred conversation types

After identifying memorable and preferred conversation types, RQ3 asked if there were any qualitative patterns or connections between memorable and preferred types that further explained how adolescents evaluated memorable conversations with their parents about sex. To address this question, a qualitative cross-case analysis (CCA) (i.e., “pattern coding”) was conducted to identify and cluster patterns according to adolescents’ memorable and preferred conversation types (Miles et al., 2014). Miles and colleagues argue that to truly understand a phenomenon, the researcher must identify how emergent categories interact with each other to describe specific patterns of relationships within the data.

Therefore, the CCA included case-oriented strategies to identify type of *memorable* conversations in relation to type of *preferred* conversations that adolescents described. This process involved assigning numerical codes to both memorable conversation types (1 = *safety*, 2 = *comprehensive talk*, 3 = *wait*, 4 = *warning/threat*, 5 = *underdeveloped*, 6 = *no talk*) and *preferred* conversation types (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 (Miles et al., 2014) linking conversation types. For example, adolescents who reported *safety* (1) as their memorable conversation and *be more specific* (2) as their preferred conversation received a code of 12. In a different example, if adolescents reported *comprehensive talk* (2) and *no change* (5) they received a code of 25. Adolescents ($n = 29$, 7.5%) who neglected to report on both memorable and preferred conversations were removed from the CCA.

Results of the CCA revealed 25 patterns between memorable and preferred conversation types. **Table 2** provides frequencies and representative examples of each possible pattern. Despite the large number of possible combinations, seven patterns emerged as primary ($n > 20$) accounting for 59.8% of the data. These primary patterns appear in boldface type in Table 2 alongside all other possible combinations. These results and **Figure 1** suggest that comprehensive talk and safety conversations that provided specifics on contraception, STIs/AIDs or pregnancy were preferred by the adolescent sample (i.e., were most often linked with “no change” in the preferred conversation prompt).

Table 2. Cross-case analysis frequencies and examples memorable and preferred patterns.

<i>Memorable and Preferred Patterns</i>	<i>n</i>	<i>%</i>	<i>Examples</i>
Comprehensive-talk			
→ No Change	56	14.4	<p>Memorable: “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 ... 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 ...” (#234, 16 YOF, sexually abstinent).</p> <p>Preferred: “Nothing it really helped me and I want to wait”(#234).”</p>
→ Appropriateness	5	1.3	<p>Memorable: “My dad always had conversations with me that included more than just using a condom if I ever have sex. That is the only thing my friends’ dads told them. My dad talked about the importance of emotional connection when you decided to have sex and the importance that we both verbally consent if we have sex. He doesn’t want me to have sex until I’m ready, but he always wants me to have all the facts. He also shared about his past mistakes, which was somewhat helpful”(#22, 18 YOF, sexually abstinent).</p> <p>Preferred: “Maybe not so much detail on his sexual history and connect more to my life”(#22).”</p>
→ Be More Specific/ Provide Guidance	4	1	<p>Memorable: “My family has always been very open about the topic and it just is a natural conversation. The conversations include tons of topics from waiting till I’m in love, being safe and never feeling pressured because of my friends. Obviously the topic is uncomfortable, but my parents have always been honest and open with me about the issues surrounding it”(#40, 18 YOM, sexually abstinent).</p> <p>Preferred: “They handled it fine but they could have still be more detailed on sexual safety”(#40).”</p>
→ Collaborate	3	0.8	<p>Memorable: “My dad explained about sex not just being a physical act, but an emotional one as well. He said that when a man loves his woman, he shows her, sex being part of that. I guess it was memorable because what my dad said was a different side for me to think about sex ... Before that, my parents had just sort of told me how sex works, not about the act itself. So, that stuck with me. Oddly enough, I understood and didn’t feel as awkward then”(#23, 19 YOF, sexually abstinent).</p> <p>Preferred: “After my dad said what he had I thought about it a lot but didn’t do anything further. I wish I had talked with them a little bit more openly about my current thoughts about sex. I wish he would have asked me more questions and made the conversation more two-way”(#23).”</p>

Table 2. Cross-case analysis frequencies and examples memorable and preferred patterns. (continued)

<i>Memorable and Preferred Patterns</i>	<i>n</i>	<i>%</i>	<i>Examples</i>
Underdeveloped	44	11.3	
→ Be More Specific/ Provide Guidance			<p>Memorable: “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”(#269, 16 YOF, debut age: 16, partners: 2, unprotected sex: yes).</p> <p>Preferred: “Go beyond information about puberty and basis of sex and really talk about it so it helps me”(#269).</p>
→ Appropriateness	13	3.3	<p>Memorable: “I only remember the one time in the sixth grade where my parents talked to me after we watched the film in health class and had to have our parents permission to partake in the film. They tried to explain what sex could do to people, like with AIDS and STDs ...” (#94, 18 YOF, debut age: 16, partners: 3, unprotected sex: yes).</p> <p>Preferred: “I just wish they wouldn’t have been so bashful and awkward about the subject and just been straight up honest with me ...”(#94).</p>
→ Talk to Me	12	3.1	<p>Memorable: “When I talked to my mom ...It was a vague conversation and neither one of us actually came out and said the word sex”(#56, 18 YOF, debut age: 14, partners: 4, unprotected sex: yes).</p> <p>Preferred: “I wish they had talked to me about it so I could have gotten the conversation from them”(#56).</p>
→ Collaborate	10	2.6	<p>Memorable: “She just told me to make smart decisions and don’t put myself if uncomfortable situations. Honestly, still today I don’t know what she meant”(#70, 18 YOF, debut age: 15, partners: 2, unprotected sex: yes).</p> <p>Preferred: “Develop and plan what you are going to say so that it can be a conversation and I can ask questions I have about sex”(#70).</p>
→ No Change	10	2.6	<p>Memorable: “The first time they talked to me about sex was with the birds and the bees. They kept it basic. I had no idea what they were talking about but I wasn’t interested in learning either”(#114, 18 YOF, sexual abstinent).</p> <p>Preferred: “I don’t wish that they did anything differently. I just think my relationship was mostly open with them, but when it came to facts about sex I get very uncomfortable so they didn’t push me too far”(#114).</p>
Safety			
→ No Change	44	11.3	<p>Memorable: “The conversation I most remember is about birth control and getting me on it so I would have less the risk of getting pregnant”(#276, 16 YOF, debut age: 15, partners: 1, unprotected sex: no). Preferred: “Nothing”(#276).</p>

Table 2. Cross-case analysis frequencies and examples memorable and preferred patterns. (continued)

<i>Memorable and Preferred Patterns</i>	<i>n</i>	<i>%</i>	<i>Examples</i>
→ Be More Specific/ Provide Guidance	25	6.4	<p>Memorable: “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 protection [options] from STDs”(#273, 16 YOM, debut age: 15, partners: 2, unprotected sex: no)</p> <p>Preferred: “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.”(#273).</p>
→ Appropriateness	8	2.1	<p>Memorable: “My mom was curious as to whether me and my partner at the time had sex. She wanted me to be safe and use the contraceptive pill rather than just condoms. She wasn’t happy at the idea of me having sex, but was glad I was honest and knew it was bound to happen”(#125, 18 YOF, debut age: 16, partners: 1, unprotected sex: no).</p> <p>Preferred: “Not be so disappointed and mad about me having sex. It was with a partner that I had for a year and we were safe and comfortable”(#125).</p>
→ Collaborate	1	0.3	<p>Memorable: “My mom always tells me to make sure that I am using protection. She was willing to get me on the pill and use condoms to avoid STD’s”(#306, 17 YOF, debut age: 17, partners: 2, unprotected sex: no).</p> <p>Preferred: “I think that she should have listened to what I had to say too and not just talk”(#306).</p>
No Talk			
→ Talk to Me	23	5.9	<p>Memorable: “My parents do not openly talk about sex”(#277, 18 YOF, debut age: 16, partners: 2, unprotected sex: yes).</p> <p>Preferred: “I wish they could talk to me about sex. But it’s already too late since I’m pregnant”(#277).</p>
→ No change	9	2.3	<p>Memorable: “Haven’t really had a conversation about it. Very conservative parents who expect us to just not do it”(#340, 17 YOF, sexually abstinent).</p> <p>Preferred: “Nothing really, I’ve learned it all during school”(#340).</p>
→ Be More Specific/ Provide Guidance	3	0.8	<p>Memorable: “My parents have never talked to me about sex. I’m guessing they assume that I know about the subject from having older brothers who have talked to me about sex stuff”(#16, 18 YOM, debut age: 15, partners: 3, unprotected sex: yes).</p> <p>Preferred: “Like noted earlier, my parents have said minimal information to me about sex. SO if I could redo any of it I guess it would be to have a more lengthy and detailed conversations about it”(#16).</p>

Table 2. Cross-case analysis frequencies and examples memorable and preferred patterns. (continued)

<i>Memorable and Preferred Patterns</i>	<i>n</i>	<i>%</i>	<i>Examples</i>
Wait			
→ Be More Specific/ Provide Guidance	21	5.4	<p>Memorable: “Don’t have sex until you’re married”(#7, 18 YOM, debut age: 13, partners: 4, unprotected sex: yes).</p> <p>Preferred: “Be more detailed and don’t just tell me to wait. Talk to me about safety, dating, and relationships”(#7).</p>
→ No change	12	3.1	<p>Memorable: “The conversation that sticks out the most in my mind is when I had a homework assignment for a class that was to ask my parents about their views on sex outside of marriage. My mom said that if you know for sure you love that person and you have been together for a long time and you are sure nothing will change after it happens it’s okay..”(#43, 17 YOF, sexually abstinent).</p> <p>Preferred: Nothing really (#43).</p>
→ Appropriateness	6	1.4	<p>Memorable: “I am from a devout Catholic family, so my parents always approached sex and something you do when you are in love and married.”(#132, 18 YOF, sexually abstinent).</p> <p>Preferred: “Just if they had made me feel more comfortable in the conversation”(#132).</p>
→ Collaborate	1	0.3	<p>Memorable: Sex is supposed to be something special and you should wait until marriage like dad and I did”(#124, 18 YOF, debut age: 16, partners: 2, unprotected sex: yes).</p> <p>Preferred: “It could be more of a back and forth conversation between us”(#124).</p>
Warning/Threat			
→ Be More Specific/ Provide Guidance	20	5.1	<p>Memorable: “My mother pretty much just said don’t get pregnant, because I’m not helping you take care of the baby. That was it”(#306, 17 YOF, debut age: 17, partners: 2, unprotected sex: yes).</p> <p>Preferred: “Not necessarily expect me to understand how to be safe and to know when I’m ready for sex in my relationships. Also more of the pros and cons of having sex”(#306).</p>
→ Collaborate	11	2.8	<p>Memorable: “My mom used my cousin, who had recently gotten a girl pregnant in high school, as an example as what happens when you have sex, especially before marriage. She made sure to use it as a caution story and how it would ruin my chances of college”(#80, 17 YOF, sexually abstinent).</p> <p>Preferred: “I don’t think I would change that specific conversation at all, but I would have encouraged my mom to let me ask questions than just lecture”(#80).</p>

Table 2. Cross-case analysis frequencies and examples memorable and preferred patterns. (continued)

<i>Memorable and Preferred Patterns</i>	<i>n</i>	<i>%</i>	<i>Examples</i>
→ Appropriateness	7	1.8	<p>Memorable: “You and your boyfriend’s parents both had children at a very young age, don’t make the same mistakes that we did. It will ruin your life”(#17, 18 YOF, debut age: 17, partners: 1, unprotected sex: no).</p> <p>Preferred: “Not assume I was an awful kid that had sex all the time. Not all kids are bad kids. Approach the conversation with more of an open mind”(#17).</p>
→ Talk to Me	7	1.8	<p>Memorable: “All my mother has said to me about sex is “you better not being having sex because you’ll get pregnant easily just like I did”(#50, 18 YOF, debut age: 15, partners: 2, unprotected sex: yes).</p> <p>Preferred: “Actually talk to me about sex stuff and not just warn me based on her past”(#50).</p>
→ No Change	5	1.3	<p>Memorable: “Be careful. If you got pregnant it could ruin everything for you”(#71, 18 YOF, debut age: 16, partners: 1, unprotected sex: no).</p> <p>Preferred: “Nothing. I didn’t want to get pregnant”(#71).</p>

Note: YOM = year-old male, YOF = year old female. Debut age = age of sexual debut. Partners = number of sexual partners reported. Twenty-nine of the preferred conversations were left blank and not included in the patterns. Bolded patterns represent the most common in the data, accounting for 60% of the patterns between memorable and preferred conversation types.

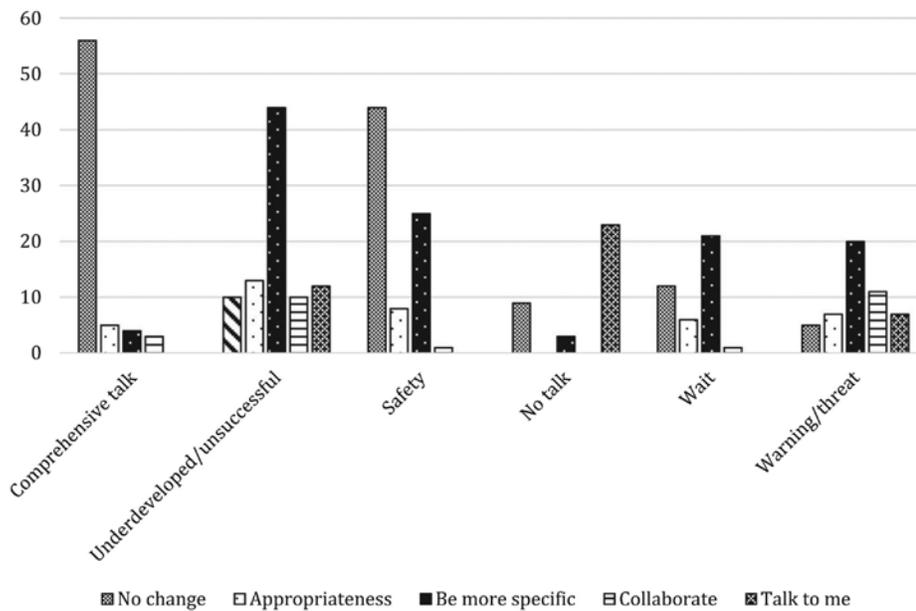


Figure 1. Cross-case matrix of memorable and preferred patterns.

Alternatively, the patterns also suggest that adolescents who reported no communication, wait messages, underdeveloped talks, warnings, or safety conversations about general references to being safe wished for more specific communication from parents.

Memorable conversation types and adolescents' perceived communication effectiveness

A one-way ANOVA was conducted to test the prediction that adolescents' perceptions of parents' communication effectiveness in conversations about sex varies by memorable conversation type (*H1*). Effectiveness, $F(6, 363) = 26.14, p < .001, \eta^2 = .30$, varied significantly by memorable conversation type.

Post hoc comparisons using the Bonferroni adjustment alpha levels of .01 per test (.05/ 5) and Tukey HSD indicated that participants considered parents who had the *comprehensive talk* ($M = 6.13$) as significantly more effective than parents whose conversations were categorized as focusing on *safety* ($M = 5.04, p < .001$), *wait* ($M = 4.50, p < .001$), *warnings* ($M = 4.25, p < .001$), *underdeveloped* ($M = 3.35, p < .001$), and *no talk* ($M = 3.23, p < .001$). In addition, *safety* ($M = 5.04$) and *wait* ($M = 4.25$) conversations were perceived as significantly more effective than conversations that were *underdeveloped* ($M = 3.35, p < .001$), and *no talk* ($M = 3.23, p < .001$). There was no significant difference between any other conversation types on perceived effectiveness. Hypothesis 1 was supported.

Memorable conversation types and adolescents' attitudes and behaviors

Finally, two separate one-way ANOVAs were conducted to evaluate the differences between type of memorable conversations adolescents reported having with their parents and adolescents' sexual risk-taking (*H2a*) and permissive sexual attitudes (*H2b*). Both permissive sexual attitude, $F(6, 374) = 4.19, p < .001, \eta^2 = .07$, and sexual risk-taking, $F(6, 372) = 2.56, p < .05, \eta^2 = .04$, varied significantly based on conversation type.

Permissive sexual attitude. Based on the Post hoc comparisons using the Bonferroni adjustment alpha levels of .01 per test (.05/5) and Tukey HSD, there was a significant difference between conversations

that were described as *safety* and *wait* such that adolescents who reported conversations about safety ($M = 2.23, p < .001$) also reported significantly lower permissive sexual attitudes than adolescents who reported their parents told them to wait ($M = 3.00, p < .001$). Adolescents who reported conversations that were characterized as *underdeveloped* ($M = 2.35, p < .05$), *warning/threat* ($M = 2.30, p < .01$), and *no talk* ($M = 2.27, p < .05$), interestingly, also reported significantly lower permissive attitudes than those who reported *wait* messages ($M = 3.00$). In short, and perhaps ironically, adolescents who heard wait messages had the most permissive sexual attitudes in the sample. No other significant difference emerged.

Sexual risk-taking. Parallel to the findings on permissive sexual attitudes, the post hoc comparisons using the Bonferroni adjustment alpha levels of .01 per test (.05/5) and Tukey HSD for sexual risk-taking indicated the mean score for *safety* ($M = 22.64$) was significantly different than *wait* ($M = 27.85, p < .05$), such that adolescents reported lower levels of sexual risk-taking when their parents shared safety in comparison with wait messages. However, unlike sexual attitude there was no significant difference between any other conversation types on adolescents' sexual risk-taking. The overall findings on type of conversation and adolescents' sexual attitudes and behaviors establish that *safety* may be more effective in reducing risk than *wait* conversations.

Discussion

Previous research on the parent-child sex talk has typically focused on adult viewpoints. Grounded in theorizing on the links between communicated sense-making and well-being (Koenig Kellas, 2018), our primary goal was to investigate the *adolescent perspective* on parent-child communication about sex-related topics. By further investigating message content that is often enduring and meaningful to adolescents, the findings paint an initial portrait of what these sex-related conversations look, feel, and sound like from adolescents' own perspectives. The findings reveal discrepancies in how adolescents perceive what parents say (*memorable* conversations) and what they wish their parents would say (*preferred* conversations). Adolescents wanted more specific and comprehensive information about sex, particularly

regarding safety, than their parents provided. Even though comprehensive talks were perceived by adolescents as the most effective, they did not predict variations in risk or attitudes. The results contribute to researchers' understanding of adolescents' overall view of their parents' communication effectiveness and the link between parent-child communication and adolescents' risky sexual attitudes and behaviors.

What adolescents hear and what they really want to hear

The results revealed that some parents have detailed conversations that cover a range of topics including relationships, safety, and emotions (e.g., *comprehensive talk*), whereas a majority focused on one-dimensional conversations that highlight specific issues, such as, *safety*, *warning/threat*, or *wait* separately. Unfortunately, underdeveloped was the most prevalent conversation type that adolescents reported. This finding supports previous research that suggests parents seem to avoid direct and detailed discussions about sex because it would require more knowledge about sexual behavior, may lead to personal disclosure of their own past experiences, and – if detailed about things like using protection or becoming sexually active – may be viewed by adolescents as permissive (Jerman & Constantine, 2010; Hyde et al., 2013).

Contrary to that fear, however, the current findings suggest that not only was *safety* the second most frequent type, but it was also viewed by our participants as one of the most helpful types of conversations. Indeed, and perhaps counterintuitively, adolescents who heard messages that were coded as safety were significantly *less* likely to engage in sexual risk-taking or to have permissive sexual attitudes than participants who reported their parents telling them to wait to have sex. When parents went into specific detail about contraception use, and protecting oneself from STIs and pregnancy, adolescents in our sample also found these instruction-based conversations as much more helpful than underdeveloped talks. Thus, our results show that some parents may understand the importance of educating their children about sexual safety over abstinence (Jerman & Constantine, 2010) and those that do may also be seen as more informative and encourage lower risk. The possible pragmatic power of this finding cannot be underestimated given research that shows parents' fears about communicating permissiveness often paralyze any communication

efforts (Elliott, 2010; Jerman & Constantine, 2010). Finding that discussing safety is perceived by adolescents as significantly more helpful than underdeveloped or no communication and that safety talks are linked to lower levels of risk should empower parents to talk early, often, and openly about safety in comprehensive ways.

In addition to conversations about safety, adolescent participants also seemed to benefit particularly from parent-adolescent communication coded as *comprehensive talk*. Comprehensive talk was perceived as significantly more effective than all the other types of reported conversations, including *safety*, *wait*, *underdeveloped*, *warnings*, and *no talk*. It seems adolescents appreciated conversations that were in-depth, covering various sex-related topics than what may be perceived as more one-dimensional conversations. These conversations were often characterized by parents' stories about their own or others' sexual history, experiences, and/or lessons. CNSM theory (Koenig Kellas, 2018) posits that retrospective storytelling (stories that family members hear and tell) reveals individual, relational, and intergenerational meaning-making, values, and beliefs and that stories framed positively predict higher levels of health and well-being for family members. This study provides initial support for these propositions by illustrating the lasting nature of comprehensive talk and its benefits (e.g., higher levels of perceived parental effectiveness).

Although comprehensive talks were perceived as the most effective, they did not predict variations in risk or attitudes. Because breadth was inherent to these types of conversations, future research may need to further evaluate the nuances of comprehensive talks to understand what elements might prevent risk. The current findings on the link between safety conversations and sexual risk-taking support previous research that being specific surrounding sexual safety greatly reduces adolescents sexual activity and increases safety practices (Guilamo-Ramos et al., 2011).

The current findings also support the idea that adolescents want their parents to talk to them about sex. Conversations characterized by *warning/threats* and *underdeveloped* and *no talk* were perceived as equally unsuccessful. In other words, even when parents attempt conversations, adolescents perceive failed attempts or empty threats with the same low levels of effectiveness as if there was no conversation at all. Although seen as ineffective, warnings, underdeveloped, and no talk conversations were still related to lower levels of risk than

were conversations focused on waiting. The results of the cross-case data analysis lend texture to the quantitative results.

Many adolescents ($n = 100$, 27.8%) were happy with the conversations they had with their parents, reporting “no change” between the most memorable and preferred, especially when parents engaged in a *comprehensive talk* or talked about *safety*. As previous research 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 effect conversations (e.g., comprehensive talk, safety) may have on adolescents’ view of them as communicators and in reducing their children’s sexual risk. Feelings of satisfaction may be particularly pronounced when both parents talk with adolescents together. As summarized in Table 1, the category *no change* was most prevalent (57%) when adolescents reported both parents talking to them. Yet, there was a small percent of adolescents ($n = 31$, 8%) who reported no change or were content with their parents’ *underdeveloped*, *no talk*, and *wait* memorable conversations. This is somewhat unsurprising given research that shows adolescents often avoid communication with their parents about sex (Afifi et al., 2008; Feldman & Rosenthal 2000). Afifi et al. (2008), however, found that the more adolescents perceived their parents as effective communicators the less anxious and less likely to avoid engaging in sex-related conversations they were. Future research should test the possibility that adolescents who are satisfied with underdeveloped conversations are also those who report high levels of anxiety and avoidance when it comes to communicating with their parents about sex.

Nevertheless, many adolescents still 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 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) 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.

Theoretical and translational implications

Based on the memorable and preferred patterns that emerged in this study, it appears adolescents want their parents to provide details about sexual safety, stories of intimate relationships, personal experiences, and emotions related to sex. As a result, and following previous research, a clear translational implication is to take the content discerned from adolescents' retrospective storytelling in this study and use these findings to create and test interventions designed to improve parent-child communication about sex. A goal of CNSM theory (Koenig Kellas, 2018) is to move from research on retrospective and/or interactional storytelling to translational storytelling research, and this study provides a first step in that trajectory. Specifically, from the stories adolescents shared, we can teach parents more about what conversational content adolescents view as effective, preferred, and that predicted lower levels of risk. This approach also corresponds with a cultural grounding approach in which adolescents' memorable and preferred accounts are used as the foundation for message design (Hecht & Krieger, 2006) and educational materials (e.g., videos; Hecht & Miller-Day, 2007, 2010).

Collaborating with adolescents, educators, and/or healthcare professionals to develop and test the effectiveness of various intervention strategies such as short public service announcement (PSAs), infographic fact sheets, online resources, or interactional training programs could provide parents with access to this study's results. These intervention techniques could include the findings that acknowledge the complexities of the "sex talk" yet highlight the importance of comprehensive talk and safety conversations over vague, threat, or wait messages. Finally, lab-based studies in which researchers train parents on preferred strategies and test their (longitudinal) efficacy based on parent-child interactions using those strategies would allow scholars to further test CNSM's interactional storytelling propositions which suggest that parent-child storytelling (e.g., comprehensive talk) characterized by engagement, dynamism in turn-taking (our collaborate theme), perspective-taking, and coherence should predict individual and relational health.

Indeed, our ongoing research shows that parents are eager and motivated to find strategies that work when talking to their children about sex. Future research should synthesize Hecht and Miller-Day's (2010) model of cultural grounding and Koenig Kellas (2018) theory of CNSM to develop interventions for parents and adolescents based on the current findings about the benefits of comprehensive/storied talk, safety conversations, and/or a combination of these strategies for reducing adolescent risk and improving parent-child relationships.

Limitations

This study should be considered in light of its potential implications as well as its limitations. Data were cross-sectional and causal claims cannot be made between adolescents' perceptions of their parents' communication about sex and adolescents' permissive sexual attitudes and behaviors. Future research should study these constructs longitudinally and/ or create interventions that illuminate potential causal effects between variables through manipulating frequency, timing, and/ or types of conversations parents have with their children.

The adolescent participants in the study were primarily female (70.4%), Caucasian (72.5%), and Christian (69.1%) and resided in the Midwest at the time of the study, and as such, the results are contextually situated in geography, culture, and values. Adolescents' perceptions of memorable parent-child conversations about sex likely differ based on factors such as race, ethnicity, religion, and region and future research should account for these potential differences.

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 data, the self-report method could have biases, such as social desirability and limited human recollection. Moreover, even though the goal of the study was to focus on adolescents' perceptions of conversations about sex-related topics, our study did not address the adolescents' goals for communicating with their parents about sex. Adolescents' main goal, for example, may be to increase their sexual literacy, whereas the parents might focus on the goal to prevent or reduce risk (e.g., early sexual debut, pregnancy). This may explain why *comprehensive* conversations were perceived as more effective, but not associated with sexual risks. Future research should observe interactions between

parents and children and compare adolescents' and parents' goals for and perceptions about the effectiveness of memorable and preferred conversations.

Overall, grounded in theories of communicated sense-making, this 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. Results of this study suggest conversations about safety and comprehensive talks were particularly important. The open-ended data also offer initial scripts for parents who might be concerned about what to say, how effective it will be, and how it will be evaluated by their adolescent children. Designing and implementing interventions that teach parents specific content derived from adolescents' points of views should help parents effectively talk with their children about sex and help reduce adolescents' risk-taking and susceptibility to STIs, teenage pregnancy, and emotional problems.

Notes

1. Outliers (e.g., adolescents who reported talking to their parents about sex 50–100 times) were removed from the descriptive analysis.
2. For these two- items in the sexual risk-taking measure, zero = 1 and 4 or more = 5.

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