
Communicating about Sex Is Important in Generating Positive Perceptions about One's Sexual and Romantic Life. The Last Decade Has Provided Insight into the Theoretical Applications on Sex Communication Research. While the Focus on Extant Research Focuses

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Article

Sex Talk as a Communicative Interaction: A Scoping Review to Guide Theory-Driven Sexual Communication Research

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Abstract: Communicating about sex is important in generating positive perceptions about one's sexual and romantic life. The last decade has provided insight into the theoretical applications on sex communication research. While the focus on extant research focuses on the psychological processes individuals employ to talk about sex, no theoretical framework exists that identifies key constructs that provides a parsimonious understanding about the communicative processes of sex and sexuality. This review sought to identify key constructs that are suitable to develop a sex talk theory. In the current project, we reviewed 24 studies including 8,698 participants ($M_{age} = 24.98$) that applied a theoretical framework to sex research. This review identified three salient constructs (e.g., disclosure, cognitive, and relational and behavioral) that are important for a sex talk theory. Last, this review indicated that scholarship should explain the relationships between the key constructs. We provided several recommendations that scholars should take when developing a theory in sex communication research.

Keywords: sex talk; communicative processes; theory development; interpersonal relationships; sexual behaviors

Sexual communication "is important to the development and maintenance of satisfying sexual relationships" (MacNeil & Byers, 2005; p. 170). Sex talk is grounded in open and honest communication about sexual matters, and a willingness to put one's social identity at risk of vulnerability (Montesi et al., 2013). Sex talk also allows individuals to disclose their sexual preferences with each other (i.e., likes and dislikes; Cupach & Comstock, 1990). Research demonstrates that sex talk serves important functions in sexual and relational satisfaction (Byers & Demmons, 1999), disclosures of one's HIV status (Bird et al., 2017) and information seeking about other's sexual health (Afifi & Weiner, 2006). Additionally, sex talk often occurs nonverbally than verbally (pulling out a condom versus directly requesting sex; Blunt-Vinti et al., 2019), and is linked to sexual function in men and women (Roels & Janssen, 2020).

Yet not all conversations about sex may lead to positive outcomes. For example, individuals may actively avoid communicating about sex because disclosures can potentially lead to feelings of shame and embarrassment (Rehman et al., 2019), uncertainty about the dynamics of the relationship (Theiss & Estlein, 2014), and other negative emotional experiences during sex talk (Theiss & Solomon, 2007). Sex talk can also be face-threatening and generate perceptions about being less competent in making safer sex decisions (Tardy & Dindia, 2006). Thus, the ebbs and flows of sex talk is marked by how open and willing individuals are to communicate about diverse sexual topics in their relationships (Hullman et al., 2022).

Given that sex talk is imperative in close relationships, it is important to understand the various ways in which it is conceptualized and defined within research. Scholars have defined sex talk as an interactive and dynamic process that involves the exchanges of sexual messages between partners (Byers, 2011), disclosures about sexual topics (Byers & Demmons, 1999), negotiation of safer sex

practices (Noar et al., 2006; Noar, 2007), assertive sex communication (Quina et al., 2000), and the quality and frequency of sex communication (Mallory et al., 2019). Indeed, scholars across the communication and psychology disciplines have proffered a variety of conceptual and operational definitions to guide their research agendas on sex talk (Widman et al., 2022). Further, when scholars do apply a theoretical framework to examine an aspect of sex talk it is unclear how communication fits into their tenets (Widman et al., 2022). As individuals often discuss various sexual topics in ongoing relationships such as in friendship (Fedd & Samp, 2023), family (Widman et al., 2016), and romantic settings (Faulkner & Lannutti, 2010), it seems logical to guide theory development to understand how interpersonal communication influences sexual health at multiple levels of analysis.

Therefore, this study provides a much-needed scoping review of sexual communication. Such a review provides a synthesis of key concepts, gaps, and sources of evidence to inform research and practice (Pham et al., 2014). We chose a scoping review because it serves to: 1) map out the body of literature in a specific area; 2) be inclusive of a greater range of study designs and methodologies; and 3) provides a descriptive overview of the reviewed studies (Pham et al., 2014). Thus, we seek to highlight and identify key concepts that explains how sex talk can improve theory building and offer practical solutions. In other words, identifying theoretical constructs to develop a sexual communication theory is warranted because it can provide a roadmap that carefully explains *how* and *why* interconnected relationships work together in a comprehensive, parsimonious fashion (Berger, 2010; Shoemaker et al., 2004).

Setting the Agenda

Scholars suggest that sexuality is a multidimensional construct that encompasses the human experiences (Sprecher, 2006). Specifically, extant research on sexuality has focused on biological, behavioral (Sprecher, 2006), emotional, cognitive (Theiss & Solomon, 2007), physiological (Denes & Afifi, 2014), and dyadic or extradyadic outcomes (Birnbaum et al., 2019; Denes & Speer, 2018). Prior studies examining sex communication have used theories such as the theory of reasoned action/planned behavior (Roberto et al., 2015), and the extended parallel process model (Witte, 1992) to name a few. Despite these advances in sexual communication research that focus on behavioral changes at the individual level (Noar, 2007), scholars have also criticized this approach because it does not consider the relational process of sexual communicative interactions (Noar et al., 2006; c.f., Theiss, 2011). Other scholars have called for interpersonal sex communication scholarship that makes logical, parsimonious predictions about sex and sexuality. For instance, Manning (2021) challenged scholars to theorize sex talk as a communicative interaction. Specifically, Manning (2021) proposes that scholars should seek to answer difficult questions about how sex talk informs interpersonal communication and relationships. Thus, this review seeks to answer Manning's calling for theory-driven sexual communication research.

Widman et al. (2022) posits that theory-building can help our understanding of how the different components fit together to make meaning of sexual and health related outcomes. Yet it remains unclear about what components goes into a sex talk theory. Additionally, less is known about how they would work together to explain their relationships. Several communication scholars have proffered guidance to developing communication theories. For instance, scholars suggest that theory builders should advance theory by explaining the causal links between the theory and hypotheses (Berger, 2010; Roloff, 2015). Specifically, scholars should explain how the cause of one phenomenon influences the outcome of another phenomenon (Roloff, 2015). In the sexual context, research demonstrates that being primed to think about sex can influence individuals' relational goals (Birnbaum et al., 2017). Thus, by examining the underlying mechanisms that help guide careful predictions about sexual communicative interactions, we believe this review will help guide future research to begin putting the pieces together to careful predictions about sex talk.

Method

Search Strategy

We used Widman et al.'s (2022) methodology of conducting a scoping review to guide our methodological choices. Additionally, we conducted our search of the literature in two waves using the PRISMA-ScR guidelines for scoping reviews (Tricco et al., 2018). In the first wave, we conducted a comprehensive search of Communication and Mass Media Complete, CINAHL, APA PsychINFO, Google Scholar, and the *Journal of Sex Research* databases to extract relevant studies that focus on communication about sex from January 1, 2010, through May 30, 2022. We chose these specific dates to identify relevant studies that examined sexual communication to guide their research efforts using a theoretical framework within the last decade.

Although Widman et al.'s (2022) scoping review did not include specific theoretical frameworks in their search terms, we included specific theories in our search strategy to generate studies that applied a theoretical framework to the study of sexual communication. Further, we did not limit our search to only relational or behavioral outcomes because recent research indicates that sex talk can influence both relational and health dynamics (Fedd & Samp, 2023; Machette et al., 2022). As such, we applied the following search terms ("sex communication" and "intimate relationships" and "dual-process model" and "sexual behaviors" and "message production" and "multiple goals theory") or ("message processing" and "social support"). This search produced an initial 8,082 articles. In the second wave, we conducted an additional search through Google Scholar and *Journal of Sex Research* databases. Specifically, we searched the reference lists of the cited articles that were identified in Wave 1 to generate additional studies using similar search terms. This yielded an additional 464 articles. Together Waves 1 and 2 yielded a total of 8,546 articles.

Inclusion Criteria

Relevant studies were included if they were: 1) a quantitative only, qualitative only, or a mixed methods study that examined sexual communication in cognitive, relational, and health outcomes; 2) application of theory to the study of sexual communication; and 3) published in an English language peer-refereed journal. Studies were excluded if they were a duplicate of the same articles identified in Waves 1 and 2. Additionally, articles were excluded if they were a theoretical essay, thematic analysis, systematic literature review, scoping review, meta-analysis, persuasive health campaigns, media, dissertation, and no focus on sex communication or relational dynamics. These criteria resulted in a final sample of 24 articles. Figure 1 provides a diagram of the PRISMA-ScR.

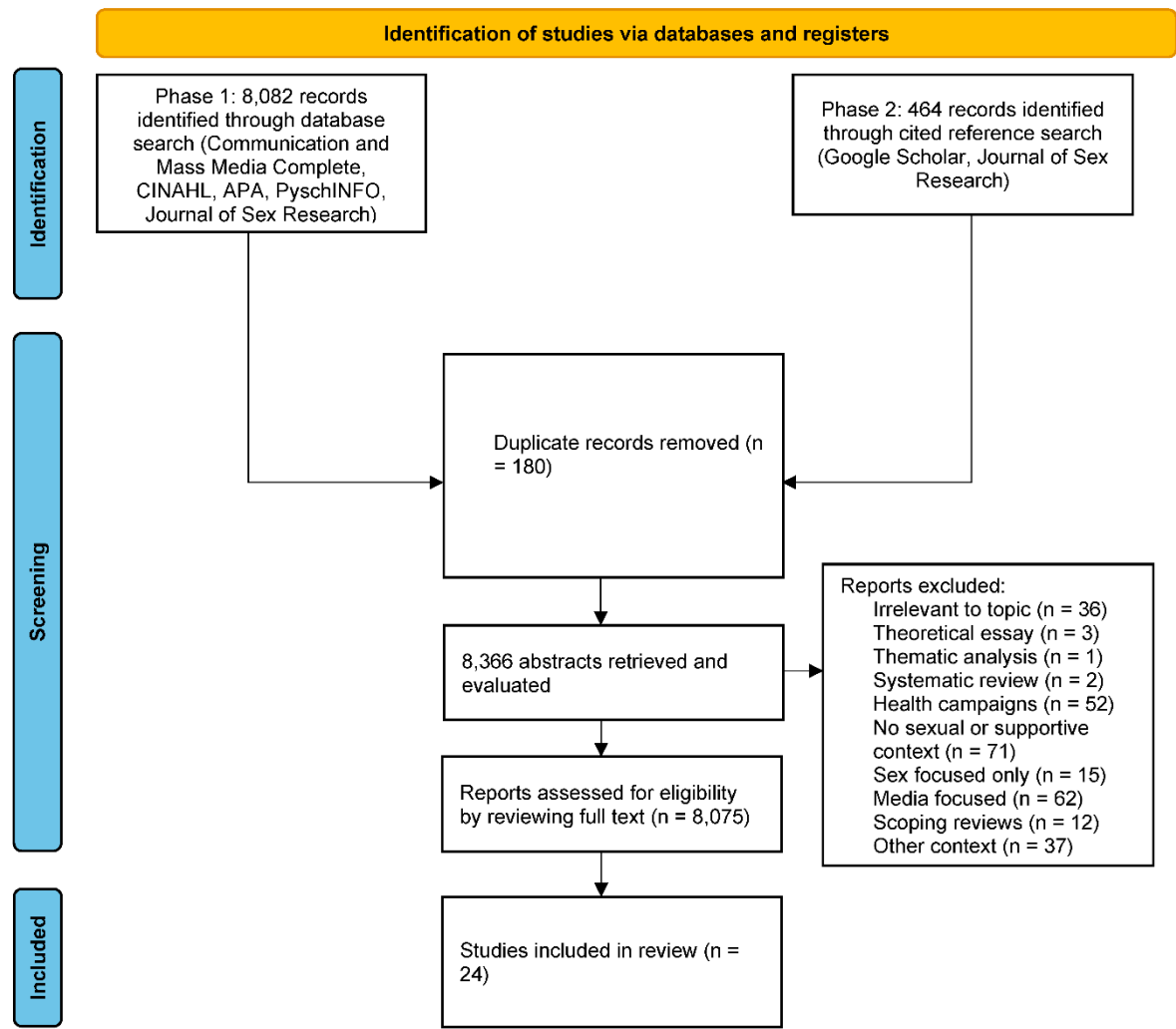


Figure 1. A diagram of the PRISMA-ScR.

Data Extraction

Two of the authors doubled coded the studies to extract demographic and study characteristics (e.g., gender, age, sample size, and sexual orientation). We also coded for the sexual health context of the study (e.g., sexual health communication), and the study design (e.g., quantitative only, qualitative only, or mixed methods). Further, we coded for communication outcomes, and major themes that emerged from each study (e.g., condom use social norms) that are discussed below. We coded for key factors we thought would complement a sexual communication theory (e.g., disclosure, cognitive processing). Lastly, we coded for the type of communicative dynamics (e.g., relational-focused, health-focused without intervention, and health-focused with intervention).

Results

Sample and Study Characteristics

Table 1 provides a summary of the sample characteristics from studies that are included in the current scoping review. A total of 8,698 participants (mean age = 24.98, SD = 9.49) were enrolled across 24 studies that assessed sexual communication using theory-driven approaches (see Table 2 for complete list of studies). Twenty-two studies (91.7%) were conducted in the United States. Studies were also conducted in Canada and China. Majority of the studies (87.5%) were quantitative, two (8.3%) were mixed methods, and one (4.2%) were qualitative.

Table 1. Study sample and characteristics ($n = 24$ studies).

	<i>n</i>	%
Gender		
Female only	5	20.8%
Female and sexual minorities	1	4.2%
Men and women	16	66.7%
Did not specify gender identity	2	8.3%
Sexual Orientation		
Heterosexual only ^a	13	54.2%
LGB	3	12.5%
Relational Type		
Single	13	54.2%
Married	2	8.3%
Dating	7	29.2%
Parent-Child	1	4.2%
Did not specify	1	4.2%
Race/Ethnicity		
Black/African American Only ^b	4	16.8%
White	17	70.8%
Hispanic/Latin(x)(a)(o)	15	62.5%
Asian/Asian American	12	50%
Black/African American	14	58.3%
Native American	4	16.8%
Other ^c	12	50%
Country		
U.S.	22	91.7%
Non-U.S. study	2	8.3%

^a"Heterosexual only" was coded for studies that did not specify the sexual orientations of their partners and thus assumed by the researchers to focus on this particular population. ^b"Black/African American only" was coded for studies this sampled this population. ^c"Other" was coded for participants that did not specify their race/ethnicity and participants that were coded as other across the studies.

Table 2. Overview of systematic studies.

Study Authors	Theory	Context/Topic	Study Design	Sample Size	Communicative Outcome	Themes	Main Findings
Afifi & Weiner (2006)	TMIM	Information-seeking about sexual health problem	Quantitative (wave 1 and wave 2 individual survey) 129 males; 136 females	Experimental ($n = 92$), control group ($n = 97$), or no-pretest group ($n = 77$)	Information-seeking about sexual health	Measured components of Sexual assertiveness Sexual decision-making	<u>Disclosure</u> Ability and willingness to disclose sexual health information. <u>Cognition</u> Evaluation of cost/benefits analysis of seeking sexual health information. <u>Other</u> Develop theory that examines ability and willingness to produce messages; examine perceptual bias.
Albritton et al. (2014)	Ecological Model	Sexual risk communication among young pregnant couples	Quantitative (cross-sectional dyadic survey)	296 expecting couples	Sexual risk communication	Individual, interpersonal, and social level factors	<u>Disclosure</u> Women disclose more sexual information than men. <u>Other</u> Interventions to improve sexual communication skills.
Brisini et al. (2022)	RTT	Relational turbulence and supportive messages	Quantitative (cross-sectional individual survey)	479 individuals	Support quality	Relational/social support Psychological reactance Person-centered messages	<u>Disclosure</u> Ability and willingness to disclose issue to a relational source. <u>Cognition</u> Chaos influence evaluation about the meaning of supportive messages. <u>Other</u>

								Supportive others should engage in perspective taking.
Burleson et al. (2011)	DPT of Supportive Communication	Processing supportive messages	Quantitative (cross-sectional individual survey)	207 individuals (i.e., study 1); 103 individuals (i.e., study 2)	Comforting messages (i.e., study 1); grief management messages (i.e., study 2)	Processing ability; relational/social support	<u>Cognition</u> Women’s ability and motivation to process supportive messages higher than men.	
Cornaccione & Smith (2017)	Multiple Goals Perspective	Women on probation and parole officers	Quantitative survey; open-ended questions	402 women in quantitative; 394 women in qualitative	Difficult issues/needs	Relational/social support Primary and secondary goals	<u>Other</u> Situational factors influence how women initiate conversations with parole officers.	
Curran et al. (2016)	Social skills deficit hypothesis	Sexual risk among African American women	Quantitative (cross-sectional individual survey)	557African American women	Sexual risk communication	Sexual communication self-efficacy Destructive conflict tactics Social skills	<u>Disclosure</u> Negative psychological factors decrease sexual communication self-efficacy. <u>Cognition</u> One’s own and communicative partners’ communication influence their conversational behaviors <u>Other</u> Sexual health interventions should address social skills with main partners.	
Francis et al. (2021)	IMBe and TGP	Sexual health intervention to generate conversations	Mixed methods	105 women (survey) 10 women (interview)	Intervention to examine condom dispenser uptake	Relational partners matter Examine condom use social norms	<u>Other</u> Communication partners, content, mode, valence, and impact influenced positive interaction with condom dispenser.	

		among Black women						
High & Solomon (2016)	Indirect Effects Model (dual-process theory)	Long-term effects of supportive messages	Quantitative (cross-sectional dyadic survey)	255 dyads	Message evaluations and message outcomes, respectively	Cognitive awareness Sex differences in cognitive processes	<u>Cognition</u>	Thorough scrutiny of supportive messages is influenced by higher levels of communicative ability and motivation.
Holmstrom et al. (2015)	DPT of Supportive Communication	Testing the complex interactions of source, message, contextual, and recipient constructs	Quantitative (cross-sectional individual survey)	328 individuals	Perceived support availability and Severity of problem on support quality, respectively	Relational status with recipient Environmental cues Memory	<u>Cognition</u>	The severity of the problem and perceived support availability influence motivation to process supportive messages.
Holmstrom et al. (2021)	CETESM	Emotion-focused versus problem-focused esteem messages	Quantitative (cross-sectional individual survey)	173 individuals	Esteem-supportive messages	Message content Style of message Degree, quantity, and relevance	<u>Disclosure</u>	Discussing esteem threatening situation and receiving emotion-focused esteem support influence greater state self-esteem.
							<u>Cognitive</u>	What supportive others say has an impact on support recipients' appraisal about the potential damage to their self-esteem.
Horan et al. (2018)	FCP and AET	Family communication patterns, sexual	Quantitative (cross-sectional individual survey)	195 individuals	Sexual risk communication	Communication patterns	<u>Disclosure</u>	

		communication, and young adults' safety/risks					Communication about sex in families	Conversation orientations predict better open and are less avoidant to communicate about sex topics with parents.
Knobloch & Theiss (2011)	Relational Uncertainty	Relational uncertainty influence on relationship talks	Quantitative (cross-sectional dyadic survey)	135 dyads	Longitudinal effects of relationship talk		Perceived threats to relationship Examining sensitive topics	<u>Other</u> Relational uncertainty and relationship talk is a dynamic process that changes over time.
Kuang and Gettings (2011)	TMIM	Uncertainty discrepancy and information management	Quantitative (cross-sectional individual survey)	248 individuals	Information management in sexual communication		Examined how relational assessments moderate the associations of TMIM variables	<u>Disclosure</u> Relational factors (i.e., marital quality, closeness, and communal coping) influence information management strategies. <u>Cognitive</u> Reappraisal of information
Li et al. (2018)	Multiple Goals Perspective	Sexual negotiation goals and goal pursuit	Quantitative (cross-sectional individual survey)	193 African American women	Language use in sexual settings		Self-oriented goals Other-oriented goals Relational goals	<u>Disclosure</u> Language choice influence relevance of condom negotiation strategies. <u>Other</u> Sexual health interventions should consider the usage of personal pronouns in formative research efforts.
Liu et al. (2021)	SST	Promoting behaviors from a cognitive and emotional perspective	Quantitative (cross-sectional experimental survey)	80 individuals	Framed health messages		Mental representation Perceived effectiveness Message processing	<u>Cognitive</u> Loss-framed messages took longer to process that gain-framed messages. Cognitive processes influence emotional responses to framed health messages.

McManus (2020)	TMIM	Information management and sexual health expertise	Quantitative (cross-sectional individual survey)	424 individuals	Support provision about sexual health uncertainty	Communication and coping efficacy Experience Expertise	<u>Disclosure</u> Communication and target efficacy have different effects on evaluation of support provision. Providers with more expertise provided less blame support.
McManus & Lucas (2018)	Multiple Goals Perspective	Multiple communicative goals in friend's sex talk	Quantitative (cross-sectional individual survey)	139 individuals	Received support (i.e., information, tangible, and nurture)	Stigmatizing sex-related concerns Interaction goals	<u>Other</u> Goals serve multiple functions in evaluating the meaning of messages about a sex-related concern. Goal interference is influenced by goal importance.
Mongeau et al. (2004)	Multiple Goals Perspective	First date goals	Quantitative (cross-sectional individual survey)	144 individuals (study 1) 241 individuals (study 2) 218 individuals (Study 3)	Communicative goals	Sociobiological sex differences (Study 1-3) Scale development (study 2) Situational context (study 3)	<u>Other</u> Across all three studies individuals aim to reduce uncertainty during first dates. Multiple goal structures influence subsequent communicative interactions.
Mou et al. (2020)	IMB	Behavioral skills model to examine condom use	Quantitative (cross-sectional individual survey)	1,247 female individuals	Safer sex negotiation skills	Culture, context, and agency Sexual assertiveness Gender roles	<u>Other</u> Contraceptive information and motivation influence safer sex practices. Gender roles influence holding traditional sexual values.

Nan (2012)	Congruence Hypothesis	HPV vaccine message frames	Quantitative (cross-sectional individual survey)	229 individuals	HPV vaccination intentions	Behavioral intentions Motivational behaviors Gender Efficacy	<u>Cognitive</u> Avoidance-oriented individuals preferred more loss-frame messages than gain-frame individuals. <u>Other</u> Women were more concerned about HPV vaccine safety than men.
Nan et al. (2019)	Prospect Theory	HPV vaccination policy and African Americans parent support	Quantitative (cross-sectional individual survey)	211 individuals	HPV vaccine mandates	Perceived risk Persuasion	<u>Cognitive</u> Individuals' cognitive response to gain- and loss-frame messages is influenced by their construal. <u>Other</u> Health communication interventions should consider how specific populations consider future consequences regarding health behaviors.
Rubinsky & Cooke-Jackson (2018)	Communication Theory of Identity	Conceptualization of sex and sexuality	Qualitative study (open-ended questions)	186 women and gender minorities	Define sex, sexuality, and sexual health	Gender Emotional health Sexual identity Framing of sexual scripts	<u>Disclosure</u> Expressions of sexuality influence how people identify with sex talk (i.e., personal, enacted, and relational identity). <u>Other</u> Emotional experiences shape how individuals define sex. Women and gender minorities define sex as an activity and identity.

Shebib et al. (2020)	CETESM	Gender and sex differences in the provision of esteem support	Quantitative (cross-sectional individual survey)	396 individuals	Quality of esteem supportive messages	Gender differences Sex differences Emotion-focused Problem-focused	<u>Disclosure</u> Females and individuals high in femininity produce highly emotional-focused messages. Biologically, females endorsed more problem-focused message to male support recipients. <u>Cognitive</u> Females and individuals high in femininity more frequently experience multiple cognitions and emotions associated with esteem threats.
Simms & Byers (2013)	Theory of Planned Behavior	Sexual initiation behaviors of romantic partners	Quantitative (cross-sectional individual survey)	151 individuals	Sexual initiation behaviors	Gender Social norms Attitudes Behavioral intentions	<u>Cognitive</u> Positive perceptions regarding partner approval and intentions influence sexual initiation outcomes. Sexual frequency associate with positive relational outcomes. <u>Other</u> Men endorsed more permissive sexual behaviors than women. Aligning with traditional sexual scripts.

Notes. TMIM = theory of motivated information management; RTT = relational turbulence model; DPT = dual-process theory, IMBe = integrative model of behavioral prediction; TGP = theory of gender and power; CETESM = cognitive-emotional theory of esteem-supportive messages; MGT = multiple goals theory; FCP = family communication patterns; AET = affective exchange theory; SST = socioemotional theory; IMB = information-motivation-behavioral skills model.

For participant demographics, 16 studies included both cis-gender women and men in their samples. Over half of the studies focused exclusively on heterosexual participants and/or had more female participants than male participants, one study included mixed cis-gender women and sexual and gender minority samples (Rubinsky & Cooke-Jackson, 2018), 2 included individuals identifying as heterosexual or a sexual and gender minority in their samples (Knobloch & Theiss, 2011; McManus & Lucas, 2018), and 5 studies focused solely on women (Cornaccione & Smith, 2017; Curran et al., 2016; Francis et al., 2021; Li et al., 2018; Mou et al., 2020). Additionally, only one study did not include participants' sexual orientation in their samples (Lui et al., 2021). Further, participants across studies were single (54.2%), dating (29.2%), married (8.3%), or they did not include the participants' relational status (4.2%). In sum, participants were relatively racially/ethnically diverse across all 24 studies and with few outside the U.S. context.

Theories Guiding Sexual Communication Research

The 24 studies included in this review included a theoretical framework to examine an aspect of communicating about sex and sexuality. Specifically, these studies directly tied a theory to guide their hypotheses and research questions. The theories that were referenced the most were (16.7%) the multiple goals theory (Cornaccione & Smith, 2017; Li et al., 2018; McManus & Lucas, 2018; Mongeau et al., 2004), (8.3%) cognitive-emotional theory of esteem-supportive messages (Holmstrom et al., 2021; Shebib et al., 2020), (8.3%) the theory of motivated information management (Afifi & Weiner, 2006; McManus, 2020), and (8.3%) dual-process theory of supportive communication (Burleson et al., 2011; Holmstrom et al., 2015).

Additional studies that took a theory-driven approach to answer their hypotheses and questions about sexual communication were communication theory of identity (Rubinsky & Cooke-Jackson, 2018), congruence hypothesis (Nan, 2012), ecological model (Albritton et al., 2014), family communication patterns and affectionate exchange theory (Horan et al., 2018), integrative model of behavioral predictions and theory of gender and power (Francis et al., 2021), information-motivation-behavioral skills model (Mou et al., 2020), indirect effects model (High & Solomon, 2016), prospect theory (Nan et al., 2019), relational uncertainty (Knobloch & Theiss, 2011), social skills deficit hypothesis (Curran et al., 2016), socioemotional theory (Liu et al., 2021), and theory of planned behavior (Simms & Byers, 2013).

Context of Sexual Communication Research

Across all 24 studies scholars have examined a wide variety of contexts to examine sex talk interactions. For instance, studies have examine seeking information about one's sexual health (Afifi & Weiner, 2006), risky sexual behaviors among African American women (Curran et al., 2016), how messages are framed to increase knowledge about HPV vaccinations (Nan, 2016), and how romantic partners initiate sex (Simms & Byers, 2003). Additionally, scholars have examined how sexual health intervention generate conversations about safer sex practices among African American women conversations (Francis et al., 2021), and how family communication patterns influence conversations about sexual risks and safety. Table 2 provides additional information regarding contexts of sex communication research.

Communicative Outcomes

The majority (29.2%) of the studies within this review examined social support (Brisini et al., 2022; Burleson et al., 2011; Cornaccione & Smith, 2017; High and Solomon, 2016; Holmstrom et al., 2015; Holmstrom et al., 2021; Shebib et al., 2020), sex/sexual behaviors (e.g., condom use) (Francis et al., 2021), sexual risk communication (Albritton et al., 2021; Curran et al., 2016; Horan et al., 2018), safer sex communication (Mou et al., 2020), Information management (Kuang & Kettings, 2011; McManus, 2018), and language use/(un) scripted sex communication (Li et al., 2018). Additional studies focused on conceptualizations of sex and sexual health (Rubinsky & Cooke-Jackson, 2018),

community-level perceptions regarding HPV vaccination (Nan et al., 2019), and longitudinal effects on relationship talk (Knobloch & Theiss, 2011).

Sexual Communication as an Interaction and Dynamic Process

Given the various ways in which sexual communication research has been operationalized, we identified salient factors that re-occurred across the studies. Specifically, studies focused social skills (Li et al., 2018; Nan et al., 2019), gendered-based messages (Mou et al., 2020), relational support (Burleson et al., 2011), self-efficacy (High & Solomon, 2018), and difficult sex topics (McManus & Lucas, 2018).

Key Constructs in Sex Communication Research

Across all studies we identified key constructs that are useful to guide a roadmap to beginning making predictions about sex talk in a comprehensive manner. Most of the studies focused on aspects of *disclosures* about sex and how it influences condom negotiation strategies (Li et al., 2018), individuals' ability and willingness to disclose sexual health information (Afifi & Weiner, 2006), and women disclose more information about sex than men regarding a sexual health threat (Albritton et al., 2014).

Another component that has been identified across studies is *cognitive* evaluations about sex talk. Specifically, studies examined how individuals evaluated the costs/benefits of seeking sexual health information (Afifi & Weiner, 2016), individuals' perceptions about sex influence their conversational behaviors (Curran et al., 2016), and individuals' responses towards framed messages (i.e., gain-frame, loss-frame) is influenced by their cognitive schema (Nan et al., 2019). We identified an additional component label *other*. Because sexual communication research is multidimensional, we did not want to specify a particular construct that may limit the theory's reach to other contexts of sex talk. Across all studies scholars suggest that sexual health interventions should focus their efforts on improving individuals' social skills when communicating about sex (Curran et al., 2016), and a comprehensive theory is needed to explain how and why individuals respond to certain supportive messages and not others (Holmstrom et al., 2015). Additional studies indicated that sex interventions should address how the usage of personal pronouns may influence their formative research process (Li et al., 2018), and more population specific tailored sex interventions (Nan et al., 2019).

Discussion

This scoping review of the sexual communication literature revealed 18 theory-driven approaches across 24 studies. This project included over 8,000 individuals across 3 countries. Our review revealed the need for future theory-driven sexual communication research, as a theory-driven approach can advance research on how individuals' think and communication about sex and sexuality. The 24 studies reviewed included a focus on interpersonal and health contexts, various communication outcomes, and key constructs to guide sexual communication research. Below, we highlight our findings regarding areas of opportunities for sexual communication research and discuss recommendations for future work.

Application of Theoretical Frameworks

This review suggest that sexual communication research relies heavily on socio-psychological theories to make predictions or give an explanation about sex and sexuality. For instance, results indicated that sex talk is a goal-driven process (i.e., desired-end state; Li et al., 2018) that can influence how individuals manage sexual information. Specifically, individuals may be driven to pursue multiple sex goals (e.g., task, identity, and relational; McManus & Lucas, 2018), when managing information about others' sexual health (Afifi & Weiner, 2006).

Additionally, this study revealed that individuals' sexual identities, behaviors and attitudes are influenced by their interpersonal relationships (Rubinsky & Cooke-Jackson, 2018; Simms & Byers,

2013). While the theories have examined cognitive factors of sex research, most of these studies relied solely on individual-level perspectives. This may be problematic from a theory-building perspective because while sex talk is defined as an interactive process that involves to interactants (Byers, 2011), research continues to examine individual-level processes. Future research can greatly benefit from theories that make predictions about dyadic-level interactions.

Contextualizing Sex-Talk Research

Sexual communication research is context-specific and is influenced by *what* and *how* individuals communicate about sex and sexuality. Stated differently, conversations about initiating sex (Simms & Byers, 2013) may have different systematic processes through which individuals may have conversations about HPV vaccinations (Nan, 2012). Moreover, most studies appear to focus on how conversations about sex may influence individuals' sexual behaviors. Indeed, positive conversations about sex between close others can lead greater safer sex practices (Francis et al., 2021). Yet, supportive others' sexual health expertise can also generate positive supportive messages for support seekers (McManus, 2020). However, there are notable limitations that need to be discussed. Most of the studies focused on individuals who were assumed to be single individuals. This severely limits ecological validity, as individuals in ongoing relationships may have different concerns about sexual conversations than individuals who may be casually dating. The nature of how individuals think their relationships are intertwined with how they communicate with each other (Knobloch & Theiss, 2011). Research should continue to examine how sexual communication influences the foundation in which individuals are involved within the relationships.

Theoretical Tenets to Guide Development of a Sex Talk Theory

The findings of this review provided a clear argument for scholars to begin developing a sex talk theory. The most salient construct that has been identified through this project is disclosure. Most studies within this review conceptualized disclosures about sex as a process that involves individuals' ability and willingness to talk about sex. From a theoretical standpoint, this makes sense because prior theory suggests that individuals may employ numerous strategies to disclose or gain information about each other (Chaudior & Fisher, 2010; Baxter & Wilmot, 1985; Omarzu, 2000). For instance, the Risk Revelation Model (RRM; Steuber, 2009) assumes that decisions to reveal information is grounded in communicators' assessments of how individuals may response to the revelation and the potential negative consequences that will follow from such revelations. Additionally, individuals may set privacy boundaries around how much or little information is shared. If an individual perceives that the other may have a negative reaction to revelation, then they will reveal less. On the other hand, if they perceive that the receiver of the message is open and acceptive of such revelation, then they will reveal more (Afifi & Steuber, 2009). While disclosure, as a global construct, was identified as a main tenet of a sex talk theory, studies within this review also examined dimensions of disclosure such as communication efficacy, target efficacy (Afifi & Weimer, 2006) and sex communication self-efficacy (Curran et al., 2016). However, it is unclear about the role of disclosure in the theory-building process. Does it serve as an antecedent, intervening, or outcome variable? Does it unfold across a conversation? Or is it a self-regulating process that explains communication phenomena? These are important questions to ask because it will help to provide a clearer roadmap to understand what processes and outcomes influence sex talk interactions. Future research should seek to continue providing theoretical clarity about how and why disclosure influences sex communication outcomes, and why they may have the intended or unintended effects (Berger, 2010), to understand sex and sexuality. Perhaps Li and colleagues' line of research (Li & Samp, 2018; Li & Samp, 2019; Li & Samp, 2020) may offer an additional avenue to understand the processes and outcomes of sex disclosures.

An additional construct identified from this review is cognitive evaluations about sex communicative interactions. Notably, these studies focused on appraisals about the potential benefits/risks of engaging in sexual behaviors. Theoretical frameworks such as the Elaboration

Likelihood Model (ELM; Petty & Cacioppo, 1986) and the Heuristic-Systematic Model (HSM; Chaiken, 1980) both specify that individuals devote cognitive effort towards messages that are highly persuasive than less persuasive resources. When individuals perceive that they have the cognitive resources (e.g., ability and motivation) to process certain messages they will thoroughly evaluate the positive or negative outcomes of the message (High & Solomon, 2016; Holmstrom et al., 2021; Liu et al., 2021). Most studies in this review relied on self-reported surveys, which could lead to participant bias and overestimation of cognitive, behavioral, and communicative assessments. While self-reported measures have its merits and limitations (Haeffel & Howard, 2010), scholars propose that combining the strengths of self-reported measures with behavioral assessment may provide a richer perspective of the communicative processes individuals navigate when discussing sex (Widman et al., 2022). This can greatly strengthen the support for a sex talk theory.

A final goal of this review was to identify a third construct to advance theory and research in sexual communication. This review revealed a clear focus on what outcome variables were salient for their research programs. As discussed earlier, we included studies that applied a theory to understand how individuals' sex and sexuality influence how they communicate about difficult topics. In instances where studies focused on relational dynamics in interpersonal settings, the outcomes of interest centered around support quality (Brisini et al., 2022), first date goals (Mongeau et al., 2004), durable effects of relational talk (Knobloch & Theiss, 2011), receiving supportive messages about a sex uncertainty (McManus, 2020), and esteem-supportive messages from close others (Holmstrom et al., 2021). On the other hand, most of the studies focused on a sexual behavioral outcome (e.g., Albritton et al., 2014; Horan et al., 2018; Kuang & Gettings, 2011). While this not only limits theoretical advancements for sex research, it may also limit insight into what relational factors may have a direct association with, intervene between, and/or have a moderating effect on behavioral outcomes. A similar argument can be made about the association between sex behaviors and relational dynamics. However, this area has received limited research because scholars typically devote their theoretical attention to explaining the psychological processes and outcomes about sex (Impett et al., 2014; Muise et al., 2018), without addressing the communicative processes about sex and sexuality. Future sex research should strongly consider their theory-building efforts on how the nuance of communication influences their sexual and relational behaviors. This will guide research agendas to strengthen the sub-discipline of sexual communication.

Limitations and Future Directions

This scoping review sought to provide the argument that theoretical advancements can be made to explain or make predictions about sex and sexuality. While the efforts of this review are noteworthy, there are glaring limitations that need to be addressed. First, studies identified within this review were conducted in the U.S. Additionally, we limited our focus on studies published in English. This leaves a large gap in the understanding of how communication about sex in other parts of the world are different. Further, participation came from individuals' who identified as being heterosexuality. While a few studies in this review focused on sexual and gender minority individuals, sexual minorities navigate sex and sexuality differently than their heterosexual counterparts. Research should continue advancing theory on research surrounding sexual and gender minorities populations. This will help in integrating their unique experiencing in providing a roadmap to understand their communicative processes. Another limitation of the review was that cultural norms and expectations were not highlighted. While several studies were inclusive of how one's culture and sexual norms influence their sexual decision-making, this was not as clear across all studies. Future, research is needed in this area to inform us on how cultural influences the relationship among theoretical constructs.

Conclusion

This project provided insight on theoretical applications on sex communication research, and identified key constructs that future research should take up to begin making theory-driven

predictions or explanations about sex. While there are lingering questions that this review did not consider and addressed, we attempted to generate a potential roadmap to begin developing a sex talk theory. We hope that future research continues forging the path to challenge current notions about sex and sexuality and provide a clearer understanding about the importance of communication in our everyday lives.

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References

- Afifi, W. A., & Caughlin, J. P. (2006). A close look at revealing secrets and some consequences that follow. *Communication Research*, 33(6), 467-488. <https://doi.org/10.1177/0093650206293250>
- Afifi, T., & Steuber, K. (2009). The revelation risk model (RRM): Factors that predict the revelation of secrets and the strategies used to reveal them. *Communication Monographs*, 76(2), 144-176. <https://doi.org/10.1080/03637750902828412>
- Albritton, T., Fletcher, K. D., Divney, A., Gordon, D., Magriples, U., & Kershaw, T. S. (2014). Who's asking the important questions? Sexual topics discussed among young pregnant couples. *Journal of Behavioral Medicine*, 37(6), 1047-1056. <https://doi.org/10.1007/s10865-013-9539-0>
- Baxter, L. A., & Wilmot, W. W. (1985). Taboo topics in close relationships. *Journal of Social and Personal Relationships*, 2(3), 253-269. <https://doi.org/10.1177/0265407585023002>
- Berger, C. R. (2010). Making a differential difference. *Communication Monographs*, 77(4), 444-451. <https://doi.org/10.1080/03637751.2010.523601>
- Brisini, K. S. C., Solomon, D. H., & Tian, X. (2022). Relational turbulence and openness to social network support for marital conflicts. *Western Journal of Communication*, 86(1), 83-102. <https://doi.org/10.1080/10570314.2021.1994638>
- Burleson, B. R., Hanasono, L. K., Bodie, G. D., Holmstrom, A. J., McCullough, J. D., Rack, J. J., & Rosier, J. G. (2011). Are gender differences in responses to supportive communication a matter of ability, motivation, or both? Reading patterns of situation effects through the lens of a dual-process theory. *Communication Quarterly*, 59(1), 37-60. <https://doi.org/10.1080/01463373.2011.541324>
- Cornacchione, J., & Smith, S. W. (2017). Female Offenders' Multiple Goals for Engaging in Desired Communication with Their Probation/Parole Officers. *Communication Quarterly*, 65(1), 1-19. <https://doi.org/10.1080/01463373.2016.1176941>
- Chaudoir, S. R., & Fisher, J. D. (2010). The disclosure processes model: understanding disclosure decision making and postdisclosure outcomes among people living with a concealable stigmatized identity. *Psychological Bulletin*, 136(2), 236. <https://doi.org/10.1037/a0018193>
- Curran, T. M., Monahan, J. L., Samp, J. A., Coles, V. B., DiClemente, R. J., & Sales, J. (2016). Sexual risk among African American women: Psychological factors and the mediating role of social skills. *Communication Quarterly*, 64(5), 536-552. <https://doi.org/10.1080/01463373.2015.1132241>
- Faulkner, S. L., & Lannutti, P. J. (2010). Examining the content and outcomes of young adults' satisfying and unsatisfying conversations about sex. *Qualitative Health Research*, 20(3), 375-385. <https://doi.org/10.1177/1049732309354274>
- Fedd, A., & Samp, J. A. (2023). "Let's talk about sex": Expanding advice response theory to sexual advice-seeking. *Southern Communication Journal*, 88(3), 266-278. <https://doi.org/10.1080/1041794X.2023.2168740>
- Francis, D. B., Zelaya, C. M., Fortune, D. A., & Noar, S. M. (2021). Black college women's interpersonal communication in response to a sexual health intervention: A mixed methods study. *Health Communication*, 36(2), 217-225. <https://doi.org/10.1080/10410236.2019.1673949>
- Grossman, J. M., Jones, C., & Richer, A. M. (2022). 'I put it all out there. I have nothing to hide. It's my mom': parents' and emerging adults' perspectives on family talk about sex. *Sex Education*, 23(4), 1-15. <https://doi.org/10.1080/14681811.2022.2062591>
- Haefel, G. J., & Howard, G. S. (2010). Self-report: Psychology's four-letter word. *The American Journal of Psychology*, 123(2), 181-188. Haefel, G. J., & Howard, G. S. (2010). Self-report: Psychology's four-letter word. *The American journal of psychology*, 123(2), 181-188.
- Harwood, J. (2010). A difference we can call our own. *Journal of Applied Communication Research*, 38(3), 295-298. <https://doi.org/10.1080/00909882.2010.490843>

- High, A. C., & Solomon, D. H. (2016). Explaining the durable effects of verbal person-centered supportive communication: Indirect effects or invisible support? *Human Communication Research*, 42(2), 200-220. <https://doi.org/10.1111/hcre.12077>
- Holmstrom, A. J., Bodie, G. D., Burleson, B. R., McCullough, J. D., Rack, J. J., Hanasono, L. K., & Rosier, J. G. (2015). Testing a dual-process theory of supportive communication outcomes: How multiple factors influence outcomes in support situations. *Communication Research*, 42(4), 526-546. <https://doi.org/10.1177/0093650213476293>
- Holmstrom, A. J., Reynolds, R. M., Shebib, S. J., Poland, T. L., Summers, M. E., Mazur, A. P., & Moore, S. (2021). Examining the Effect of Message Style in Esteem Support Interactions: A Laboratory Investigation [Article]. *Journal of Communication*, 71(2), 220-245. <https://doi.org/10.1093/joc/jqab001>
- Horan, S. M., Morgan, T., & Burke, T. J. (2018). Sex and Risk: Parental Messages and Associated Safety/Risk Behavior of Adult Children [Article]. *Communication Quarterly*, 66(4), 403-422. <https://doi.org/10.1080/01463373.2017.1418404>
- Impett, E. A., Muise, A., & Peragine, D. (2014). Sexuality in the context of relationships. In D. L. Tolman, L. M. Diamond, J. A. Bauermeister, W. H. George, J. G. Pfaus, & L. M. Ward (Eds.), *APA handbook of sexuality and psychology*, Vol. 1. Person-based approaches (pp. 269–315). American Psychological Association. <https://doi.org/10.1037/14193-010>
- Knobloch, L., & Theiss, J. (2011). Relational Uncertainty and Relationship Talk within Courtship: A Longitudinal Actor-Partner Interdependence Model [Article]. *Communication Monographs*, 78(1), 3-26. <https://doi.org/10.1080/03637751.2010.542471>
- Kuang, K., & Gettings, P. E. (2021). Uncertainty management in sexual communication: Testing the moderating role of marital quality, relational closeness, and communal coping. *Health Communication*, 36(11), 1368-1377. <https://doi.org/10.1080/10410236.2020.1751401>
- Liu, X., Mikels, J. A., & Stine-Morrow, E. A. L. (2021). The psycholinguistic and affective processing of framed health messages among younger and older adults. *Journal of Experimental Psychology: Applied*, 27(2), 201–212. <https://doi.org/10.1037/xap0000285>
- Li, Y., Samp, J. A., Coles Cone, V. B., Mercer Kollar, L. M., DiClemente, R. J., & Monahan, J. L. (2018). African American Women's Language Use in Response to Male Partners' Condom Negotiation Tactics. *Communication studies*, 69(1), 67-84. <https://doi.org/10.1080/10510974.2017.1412335>
- Li, Y., & Samp, J. A. (2019). Predictors and outcomes of initial coming out messages: Testing the theory of coming out message production. *Journal of Applied Communication Research*, 47(1), 69-89. <https://doi.org/10.1080/10570314.2017.1398835>
- Li, Y., & Samp, J. A. (2021). Predictors and outcomes of LGB individuals' sexual orientation disclosure to heterosexual romantic partners. *Journal of Applied Communication Research*, 49(1), 24-43. <https://doi.org/10.1080/00909882.2020.1849769>
- McManus, T. G. (2020). Providing support to friends experiencing a sexual health uncertainty. *Journal of Applied Communication Research*, 48(4), 515-536. <https://doi.org/10.1080/00909882.2020.1797143>
- McManus, T. G., & Lucas, A. A. (2018). Received support from friends about sex-related concerns: A multiple goals perspective. *Communication Reports*, 31(3), 143-158. <https://doi.org/10.1080/08934215.2018.1464199>
- Mongeau, P. A., Serewicz, M. C. M., & Therrien, L. F. (2004). Goals for cross-sex first dates: identification, measurement, and the influence of contextual factors. *Communication Monographs*, 71(2), 121-147. <https://doi.org/10.1080/0363775042331302514>
- Mou, Y., Wu, Y., Wang, J., Wu, Y., Li, Z., & Cui, Y. (2020). Safer Sex Practice Among Female Chinese College Students and Its Antecedents: A Culture-Centered Approach. *International Journal of Sexual Health*, 32(3), 282-292. <https://doi.org/10.1080/19317611.2020.1796882>
- Muise, A., Maxwell, J. A., & Impett, E. A. (2018). What theories and methods from relationship research can contribute to sex research. *The Journal of Sex Research*, 55(4-5), 540-562. <https://doi.org/10.1080/00224499.2017.1421608>
- Nan, X. (2012). Communicating to Young Adults About HPV Vaccination: Consideration of Message Framing, Motivation, and Gender [Article]. *Health Communication*, 27(1), 10-18. <https://doi.org/10.1080/10410236.2011.567447>

- Nan, X., Daily, K., Richards, A., & Holt, C. (2019). Parental Support for HPV Vaccination Mandates Among African Americans: The Impact of Message Framing and Consideration of Future Consequences [Article]. *Health Communication*, 34(12), 1404-1412. <https://doi.org/10.1080/10410236.2018.1493419>
- Omarzu, J. (2000). A disclosure decision model: Determining how and when individuals will self-disclose. *Personality and Social Psychology Review*, 4(2), 174-185. https://doi.org/10.1207/S15327957PSPR0402_05
- Petronio, S. (2002). *Boundaries of privacy: Dialectics of disclosure*. Suny Press.
- Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwen, S. A. (2014). A scoping review of scoping reviews: Advancing the approach and enhancing the consistency. *Research Synthesis Methods*, 5(4), 371-385. <https://doi.org/10.1002/jrsm.1123>
- Rogers, A. A. (2017). Parent-adolescent sexual communication and adolescents' sexual behaviors: A conceptual model and systematic review. *Adolescent Research Review*, 2, 293-313. <https://doi.org/10.1007/s40894-016-0049-5>
- Roloff, M. E. (2015). Theorizing interpersonal communication: Progress and Problematic Practices. *Communication Theory*, 25(4), 1050-3293. <https://doi.org/10.1111/comt.12081>
- Rubinsky, V., & Cooke-Jackson, A. (2018). Sex as an intergroup arena: How women and gender minorities conceptualize sex, sexuality, and sexual health. *Communication Studies*, 69(2), 213-234. <https://doi.org/10.1080/10510974.2018.1437549>
- Shebib, S. J., Holmstrom, A. J., Mason, A. J., Mazur, A. P., Zhang, L., & Allard, A. (2020). Sex and Gender Differences in Esteem Support: Examining Main and Interaction Effects. *Communication Studies*, 71(1), 167-186. <https://doi.org/10.1080/10510974.2019.1692886>
- Shoemaker, P. J., Tankard Jr, J. W., & Lasorsa, D. L. (2004). *How to build social science theories*. Sage.
- Simms, D. C., & Byers, E. S. (2013). Heterosexual daters' sexual initiation behaviors: Use of the theory of planned behavior. *Archives of Sexual Behavior*, 42(1), 105-116. <https://doi.org/10.1007/s10508-012-9994-7>
- Theiss, J. A., & Estlein, R. (2014). Antecedents and consequences of the perceived threat of sexual communication: A test of the relational turbulence model. *Western Journal of Communication*, 78(4), 404-425. <https://doi.org/10.1080/10570314.2013.845794>
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., ... & Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Annals of Internal Medicine*, 169(7), 467-473. <https://doi.org/10.7326/M18-0850>
- Widman, L., Choukas-Bradley, S., Noar, S. M., Nesi, J., & Garrett, K. (2016). Parent-adolescent sexual communication and adolescent safer sex behavior: A meta-analysis. *JAMA Pediatrics*, 170(1), 52-61. <https://doi.org/10.1001/jamapediatrics.2015.2731>

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