UNIVERSITY OF CALIFORNIA

Santa Barbara

Communicating Sexual Consent: The Role of Uncertainty, Information Seeking, and Misunderstanding in Predicting Unwanted Sexual Activity

A dissertation submitted in partial satisfaction of the

requirements for the Degree Doctor of Philosophy in Communication

by

Katlyn Elise Gangi

Committee in charge:

Professor Walid Afifi, Co-Chair

Professor Howard Giles, Co-Chair

Professor Tamara Afifi

March 2017

The dissertation of Katlyn Elise Gangi is approved.

_____

Tamara Afifi

_____

Howard Giles, Co-Chair

_____

Walid Afifi, Co-Chair

December 2016

ACKNOWLEDGMENTS

Undoubtedly, this dissertation as well as my graduate career would not have been possible alone. In the same way that interpersonal relationships are strengthened by the social support of their networks, my growth as a graduate student was bolstered by the scholarly, instrumental, and emotional support of a network for which I am forever grateful. Those on that "team" include my doctoral committee, my parents and siblings, close friends, and my husband.

I feel so fortunate to have learned and conducted research with Tammy Afifi. Tammy, your enthusiasm for research and attention to the nuances of interpersonal relationships is contagious. I have felt inspired by you and your energy. In addition, you are a teacher to emulate; I loved learning from your teaching methods with undergrads and observing the way they connect to you. Thank you for your insightful feedback and encouragement.

I am also grateful for the guidance and wisdom of Howie Giles. Howie, every conversation with you over my graduate career has sparked new intellectual curiosity. You have encouraged me to "think big" and have set the bar high. On top of that, your positivity, energy, and humor have helped make graduate school so enjoyable for me.

I am indebted to my advisor, Walid Afifi. Walid, you have helped me truly engage in advancing theoretical knowledge while simultaneously challenging me to think about its real-world application. I now write about each new idea with the consideration of what is truly newsworthy, and what is counter-intuitive to what we already know. I enjoyed the research projects we designed and conducted together, and realize now that your trust in my abilities early on was enabling me to grow as an independent researcher. Some of my fondest

memories of graduate school are brainstorming study ideas in your research groups. I look forward to continuing to collaborate on future work and will not ever shy away from your direct, thoughtful feedback.

My graduate career also would not have been the same without the support of three colleagues and close friends: Stephanie Tikkanen, Samantha Coveleski-Mazur, and Annie Merrill. Stephanie, thanks for being a great "big sister" and always having my back. I could always count on you for a smiling face, words of encouragement, and delicious baked goods. Sam, thank you for your friendship and sense of humor; you have helped keep me grounded. Annie, thank you for all your support – equal parts emotional and instrumental. I turned to you countless times for statistical guidance, theory-building discussions, a good laugh, and a glass of wine. To all three of you, I'm so glad we had a chance to grow together as both interpersonal scholars and as friends.

I also owe a thank you to my close friends, Jen Geist, Lindsey Torgerson, Kelly Mooradian, and Aubriana McEvoy, who each supported me long-distance in this dissertation and throughout graduate school. Those phone calls, cards, texts, and occasional visits to help me disconnect mean more than you know, and always reminded me of the "team" behind me. Thank you, each of you – my bridesmaids for life.

Two other professors are also part of this support network: Dr. Steve McCornack and Dr. Alan Sillars. Thank you, Steve, for piquing my interest in interpersonal communication, research, and teaching early on in my years at MSU. Alan, thanks for your mentorship in Montana, your always frank and sound advice, and your belief that I could succeed as a doctoral student. In addition, thank you to all the professors I haven't named here who were part of my doctoral journey.

My family members deserve honorary Ph.D.'s for their unwavering support and belief in me, even in moments I didn't believe in myself. Dad, thank you for inspirational cards. You taught me that sometimes it takes *more* effort to have a positive outlook on life – but that it's the only way to live. Mom, thank you for always helping me create a plan for success, especially in the moments when I felt too overwhelmed to start. You taught me to never give up on a commitment, and to practice self-care along the way. Kyle, thank you for being my lifelong best friend, for understanding me like no one else, and making me laugh. When I opened the box of Portillo's beef sandwiches (a Chicago favorite) that you sent to California as I anxiously prepared for my dissertation defense, my eyes filled with tears – it was a thoughtful gesture I won't forget. Alejandro, thank you for visiting me and for reminding me of what's truly important: time with family. Lee, thank you for being a constant cheerleader of mine. Edgar, thank you for never doubting that I could accomplish my goals. I'm also grateful for the love and support from my in-laws.

Finally, there aren't enough words to acknowledge my husband, Lorenzo. Lorenzo, thank you for all your support in these past five years, which started with you moving away from Montana to support my education. Not only did you continually remind me of your confidence in my academic abilities during graduate school, you also helped me stay balanced and enjoy life throughout the process. While working on my Ph.D., we traveled to see family several times each year, got a dog, went on three international trips, were married, and had a baby – wow! Reflecting on it, I realize you have always helped me work hard, but invest in what's important in life – rich experiences like travel, enjoying meaningful hobbies, eating good food, and spending time with those you love – and I am grateful that you helped me make the space for that. Thank you! And although he won't read this for a long time, I

also dedicate this dissertation to my son, Carlo… You are the light of my life. Although finishing a dissertation during naptimes was challenging, being a mother to you taught me how strong I could be and inspired me to accomplish something big. I hope you, too, will dream big dreams – and we'll be right by your side cheering you on.

CURRICULUM VITAE

KATLYN ELISE GANGI

University of California, Santa Barbara • Department of Communication

EDUCATION

Ph.D.	March 2017	Communication, University of California, Santa Barbara Advisor: Walid Afifi Dissertation title: *Communicating sexual consent: The role of uncertainty, information seeking behaviors, and misunderstanding in predicting unwanted sexual activity*
M.A.	May 2011	Communication Studies, University of Montana Advisor: Alan Sillars Thesis: *In the game of love, play by the rules: An investigation of the implications of relationship rule consensus about the meaning of honesty and deception in romantic relationships*
B.A.	May 2009	Psychology, Michigan State University

RESEARCH

Refereed Publications:

Afifi, W., **Gangi, K.**, Blascovich, J., Afifi, T., Cornick, J., Merrill, A., Ryan, W. & Sterling, K. (2016). Mothers' impact on daughters' cardiovascular reactivity in a high-threat context: An immersive virtual environment study. *Human Communication Research*, *42*(3), 371-395. doi: 10.1111/hcre.12085

Gangi, K., & Soliz, J. (2016). De-dichotomizing interpersonal and intergroup dynamics: Perspectives on communication, identity and relationships. In H. Giles & A. Maass (Eds.), *Advances in intergroup communication.* New York, NY: Peter Lang.

Scranton, A., Afifi, T., Afifi, W., & **Gangi, K**. (2016). Networks of passing: Experiences of undocumented Latin American immigrants' identity negotiation. *Journal of Intercultural Communication Research*, 1-21. doi: 0.1080/17475759.2016.1217913

Dunbar, N. E., **Gangi, K.**, Coveleski, S., Adams, A., Bernhold, Q., & Giles, H. (2016). When is it acceptable to Lie? Interpersonal and intergroup perspectives on deception. *Communication Studies*, *67*(2), 129-146. doi: 10.1080/10510974.2016.1146911

Roggensack, K. E., & Sillars, A. (2014). Agreement and understanding about honesty and deception rules in romantic relationships. *Journal of Social and Personal Relationships*, *31*(2), 178-199. doi: 10.1177/0265407513489914

Conference Papers and Presentations:

Scranton, A., Afifi, W.A., Afifi, T., & **Gangi, K**. Networks of passing: Experiences of undocumented Latin American immigrants' identity negotiation (2016, November). Annual Meeting of the National Communication Association, Philadelphia, PA.

Dunbar, N., Giles, H., Adams, A., Bernhold, Q., Coveleski, S., & **Gangi, K**. When is it ok to lie? (2015, November). Interpersonal and intergroup perspectives on deception. Annual Meeting of the National Communication Association, Interpersonal Communication Division, Las Vegas, NV.

Afifi, W., **Gangi, K**., Blascovich, J., Afifi, T., Cornick, J., Merrill, A., Ryan, W. & Sterling, K. (2014, May). *Mothers' impact on daughters' cardiovascular reactivity in a high-threat context: An immersive virtual environment study*. 64th Annual Meeting of the International Communication Association, Interpersonal Communication Division, Seattle, WA.

Nabi, R., Dragojevic, M., Hartsell, E., Hasell, A., Mangus, M., & **Roggensack, K.** (2013, June). *"That's-Not-All" as a media influence strategy: Exploring the role of excitement in motivating purchasing desire.* 63rd Annual Meeting of the International Communication Association, Mass Media Division, London, England.

Roggensack, K., & Sillars, A. (2012, May). *In the game of love, play by the rules: Agreement and understanding about honesty and deception rules in romantic relationships.* International Communication Association, 62nd Annual Meeting of the International Communication Association. Interpersonal Communication Division, Phoenix, AZ.

Roggensack, K., McFadden, J., Sherwood, A., & Sullivan, S. (2010, November). *I got dumped on Facebook: New media's role in conflict management*. Annual Meeting of the National Communication Association, Interpersonal Communication Division, San Francisco, CA.

Work in Progress:

Afifi, T. D., Davis, S., Denes, A., **Gangi, K**., Scranton, A., Coveleski, S, Bushman, N. *The impact of not "fitting in" the family: Family communication patterns, identity gaps, and emerging adults' risky behaviors.* Manuscript under review.

Afifi, W. A., & **Gangi, K**. *The role of mood in influencing information seeking in the context of genetic testing: A test of the theory of motivated information management.* Manuscript in preparation.

Podcast:

Gangi, K. (2013, October 31). SAGE's Relationship Matters podcast (Producer). *Relationship Rules: Honesty, Deception, and Relationship Satisfaction – Relationship Matters Podcast 26*. [Audio podcast]. Retrieved from http://spr.sagepub.com/content/early/2013/06/07/0265407513489914/suppl/DC1

TEACHING EXPERIENCE

Department of Communication, University of California, Santa Barbara Sep 2011-Jun 2015
Graduate Teaching Associate
COMM111: Nonverbal Communication (instructor of record) Summer 2014, Winter 2015

Graduate Teaching Assistant

COMM160: The Dark Side of Interpersonal Communication (Dr. Desiree Aldeis)	Spring 2015
COMM120: Interviewing Theory and Practice (Dr. Courtney Davis)	Fall 2014
COMM128: Intergroup Communication (Dr. Howie Giles)	Spring 2014
COMM107: Interpersonal Communication (Dr. Desiree Aldeis)	Winter 2014
COMM124: Family Communication (Dr. Desiree Aldeis)	Fall 2013
COMM168: Social Marketing (Dr. Walid Afifi)	Spring 2013
COMM121: Communication and Conflict (Dr. Tamara Afifi)	Winter 2013
COMM115: Interactive Media Theory and Design (Dr. Debra Lieberman)	Fall 2012, Winter 2012
COMM111: Nonverbal Communication (Dr. Walid Afifi)	Spring 2012, Spring 2013
COMM1: Introduction to Communication (Dr. Dorothy Mullin)	Fall 2011, Summer 2012

Department of Communication Studies, University of Montana Aug 2009-Jun 2011
Graduate Instructor
COMM111: Introduction to Public Speaking Fall 2009-Winter 2010
Course Supervisor: Dr. Steve Schwarze

Graduate Teaching Assistant
COMM110: Interpersonal Communication Spring 2011
Course Supervisor: Dr. Christina Yoshimura

AWARDS AND HONORS

Female recipient of campus-wide annual *Fiona Goodchild Award for Excellence as a Graduate Student Mentor of Undergraduate Research*, Academic Senate Committee on Undergraduate Student Affairs, UCSB May 2013

Selected to participate in the 2010 *Invitational Masters Student Institute*, hosted by the School of Communication, Information, and Library Studies, Rutgers University Oct 2010

Outstanding Presentation Award at Graduate and Faculty Research Conference for group paper: "I got dumped on Facebook: New media's effects on conflict management", University of Montana Apr 2010

Dr. James S. Feurig Achievement and Service Award, based on leadership positions, athletic and academic success, and community service, Michigan State University May 2009

SERVICE

Service to the Discipline

- Reviewer for *Journal of Social and Personal Relationships* 2012 - Present
- Reviewer for *Journal of Language and Social Psychology* 2015 - Present
- NCA Paper reader, Interpersonal Division 2015 - Present

University of California, Santa Barbara:

- Chair of Department Colloquia (5 times) 2012-2015
- Planning team for *Graduate Student Recruitment Weekend* Feb 2012, Feb 2013
- Member of *Graduate Student Advisory Committee* 2012-2013
- Member of *Department Search Committee* for Assistant Professor Fall 2012

University of Montana:

- Graduate Student Representative for Department 2010-2011
- Student Evaluation Committee Member for Department Sep-Oct 2010

PROFESSIONAL AFFILIATIONS

National Communication Association (NCA) Feb 2010-present
International Communication Association (ICA) Jan 2012-present

ABSTRACT

Communicating Sexual Consent: The Role of Uncertainty, Information Seeking, and Misunderstanding in Predicting Unwanted Sexual Activity

By

Katlyn Elise Gangi

Abstract: Given the prevalence of unwanted sexual activity reported by college students, the current study focused on the communication of sexual consent and how misunderstanding may occur in this context. More specifically, it investigated the role of uncertainty, information-seeking behaviors and misunderstanding in explaining unwanted sexual activity. This work is based on the idea that some unwanted sexual activity, is in part, a result of making inaccurate inferences about another's interest level related to particular sexual activities (i.e., whether or not the partner consents to a particular sexual act). The investigation used a dyadic design and applied theoretical thinking from sexual scripts, Error Management Theory, empathic accuracy, and the Theory of Motivated Information Management (TMIM) to predict conditions under which information seeking efforts will occur and identify barriers to consent interactions as well as barriers to achieving an accurate understanding of one's sexual partner. Results revealed that individuals often misperceive that their sexual encounters are completely mutually consensual, and this misperception is associated with unwanted sexual activity. Additionally, the study provided support for

TMIM as a useful framework for this context, and revealed that negative outcome expectancies and low communication efficacy are barriers to people seeking information about consent. The findings are discussed in terms of a first step in developing a communicative intervention designed to prevent unwanted sexual activity and promote consensual sex.

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

An alarming number of individuals experience sexual assault in their lifetimes, with college students at particularly high risk compared to the general population (Daigle, Fisher, & Cullen, 2008). A meta-analysis of prevalence research from 2000-2015 confirmed that unwanted sexual contact is most prevalent on college campuses, which includes sexual coercion, incapacitated rape, and forcible rape (Fedina, Holmes, & Backs, 2016). Although there are a number of factors that can contribute to unwanted sexual activity, the absence of sexual consent is frequently viewed as the most defining characteristic of sexual violence (Beres, 2014). In efforts to curb sexual assault, much attention has been focused on helping young adults improve the ways they communicate sexual consent, as reflected in the rise of educational programs and social marketing campaigns on the issue (Donat & White, 2000). New laws also aim to prevent sexual assault by denoting who has the capacity to give consent (in terms of age, mental capacity, intoxication, etc.) as well as what constitutes or "counts as" consent communicatively (Senate Bill 967, 2014), although this varies by jurisdiction.

In recent history, California became the first state in the country to pass a law requiring colleges to have a consent policy or lose state financial aid. This law requires an "affirmative, unambiguous, and conscious decision by each participant to engage in mutually agreed-upon sexual activity." (Senate Bill 967, 2014). It also articulates what does *not* constitute consent: lack of protest, silence, or the existence of a dating relationship. In other words, consent must be *clearly communicated and accurately understood* at each individual encounter. However, this ideal situation may be clearer on paper than in practice, as social

science reveals reasons this context is ripe for indirect communication, reliance on scripts, and the application of cognitive biases that make this kind of direct exchange difficult, even in best-case scenarios.

The communication of consent is a difficult legal issue, but fundamentally, a complex communicative issue. Specifically, difficulty arises in communication because individuals often interpret the same behavior in divergent ways (Cupach & Metts, 1991) and men are prone to overperceive sexual interest, even in its absence (Hickman & Muehlenhard, 1999). Because sexual consent necessitates both sexual intention and the *communication* of sexual intention, and because these intentions can be communicated both verbally and nonverbally, certain strategies may lead to greater chances of misinterpretation than others (Winslett & Gross, 2008). The consequence is that the negotiation of consent to engage in sexual activity is characterized by frequent mismatches between what is wanted internally, what is communicated, and what is understood by the partner (Peterson & Muehlenhard, 2007) – and the resulting misunderstanding can result in unwanted sexual activity.

In an analysis of the sexual consent literature, Beres (2007) argued that a lack of empirical work on the communication of consent has resulted in scholarly disagreement about what conceptualizes consent. For example, whereas some scholars' version of consent centers around psychological processes and inner desires, others place importance on a physical act, where engaging in a particular behavior is thought to indicate agreement (Muehlenhard, 1996). Beres (2007) calls upon researchers to focus on the ways in which people communicate (or not) their consent and how they interpret their partners' willingness. Importantly, some recent work has begun to identify the strategies that individuals use to express consent in their own sexual encounters (Jozkowski, Peterson,

Sanders, Dennis, and Reece, 2014), yet theoretical explanations surrounding the communicative negotiation of sexual consent and its implications for the occurrence unwanted sexual activity remains mostly absent from the literature. This investigation aims to fill this gap.

Clarifying the Context for this Investigation

Unwanted sexual activity can include rape or sexual assault. According to U.S. Department of Justice Special Report (Sinozich & Langton, 2014), rape is defined as "the unlawful penetration of a person against the will of the victim, with use or threatened use of force, or attempting such an act. Rape includes psychological coercion and physical force…" (p. 11). Sexual assault is more broadly defined, and may or may not involve rape; "these crimes may include attacks or attempted attacks usually involving unwanted sexual contact between a victim and offender" (p. 11). To be clear, there are at least two broad groups of individuals who may become involved in situations of unwanted sexual activity, and only one of which could be impacted by a communication intervention.

The first group of individuals includes those for whom obtaining consent from one's partner does not matter. These individuals are likely to rape regardless of the communication that occurs. Indeed, evidence points to the fact that a subset of rapists tend to commit the majority of rapes. In Lisak and Miller's (2002) sample of 1,882 men, 120 (6.4%) met the criteria for rape or attempted rape. Of this percentage, these rapists averaged 4.0 rapes each. When removing the single-act rapists, the average number of rapes is even more alarming: repeat rapists averaged 5.8 rapes each. Put differently, a small subset of men commit a disproportionately large majority of rapes that occur. In addition, repeat rapists committed a mean of 13.75 acts of interpersonal violence, more broadly. In other words,

these men are inclined to be violent, not just in the sexual realm. As suggested by Hickman and Muehlenhard (1999), sexually aggressive individuals likely ignore what their partners say or hear what they want to hear, and might even use miscommunication to excuse rape. Thus, this group of individuals is not the focus of the current study; their behavior is unlikely to be explainable or predictable by a theoretical framework founded on decisions related to uncertainty management and perceptual accuracy. The second group of individuals are those who generally approach sexual activity as something that involves mutual consent, but whose motivations, perceptions, and cognitive biases sometimes lead to the participation in sexual activity in which their partners are not consensual actors. Although quantitative data is lacking regarding the percentage of individuals who report misunderstandings in the context of consent, many of these individuals presumably are motivated to have consensual, mutually beneficial sexual experiences. It is these individuals for whom the theoretical frameworks being applied to this investigation may be explanatory and who may benefit from a potential communication intervention stemming from the findings of this investigation.

Individuals arrive at inaccurate perceptions of their partner's consent to engage in sexual activity for a number of reasons. Several theoretical perspectives frame why these misunderstandings occur so frequently, and lay the foundation for predictions that guide the current research.

CHAPTER TWO

LITERATURE REVIEW

(Mis)perception of Consent

Indirect communication. The dynamic social process by which individuals communicate sexual interest or lack thereof has been referred to as "sexual bargaining," whereby misperception can occur at different points in the process – from early interest to interpreting consent (Farris, Treat, Viken, & McFall, 2007). During this "bargaining" process, perceptions of sexual interest and of consent to engage in sexual activity can be divergent because the cues that people use to estimate sexual interest are often ambiguous, unclear, and confusing. While communication of sexual intent is expressed on a continuum from overt and direct to covert and veiled, indirect approaches to communicating sexual intent are used more often by both men and women and are preferred to overt approaches, with direct verbal communication typically utilized as a last resort (Lindgren, Schacht, Pantalone, & Blayney, 2009). Indirect communication allows individuals to gauge each other's interest and determine if feelings are mutual or likely to not be reciprocated (Henningsen, 2004).

Women also favor indirect communication when communicating disinterest as a way to avoid hurting their partner's feelings (Lindgren et al., 2009), which can lead to problems decoding the meaning of the behavior. For example, the nonverbal behavior of *not* resisting a sexual advance is often interpreted by a man as indicative of a woman's willingness to engage, even if there are other reasons for her lack of resistance (Hickman & Muehlenhard, 1999). Indeed, and in accordance with recent litigation, an absence of communication does not signal consent nor does it signify non-consent, but interactants nonetheless make

attributions based on the social information at hand (see Jozkowski, 2015 for overview). Because of this tendency toward indirectness in this context, interactions requiring the interpretation of sexual interest and negotiating consent make both actors vulnerable to errors in decoding. In sum, conversations of this nature tend to be characterized by such ambiguity, in part, because indirect communication is so prevalent.

One major hurdle in accurately interpreting sexual consent is that individuals often privilege nonverbal cues over verbal cues in both expressing and interpreting consent (Humphreys, 2000). Some previous work has attempted to identify what specific verbal and nonverbal cues individuals tend to interpret as consent (e.g., Hall, 1995). Cues of interest may include, but are not limited to, sexual conversation, going somewhere private, and nonverbal behaviors such as eye contact and "accidental" touching; disinterest may primarily be displayed through body language such as walking away, pulling away, avoiding eye contact, or crossing one's arms (Lindgren et al., 2009). Relatedly, Hickman and Muehlenhard (1999) utilized a sexual consent scale containing 34 behaviors where participants were asked to rate whether they would interpret each behavior as consent to sex from their date as well as how frequently they engaged in each behavior. Later, Beres, Herold, and Maitland (2004) adapted the scale for same sex relationships. In both studies, participants reported using nonverbal behaviors more frequently than verbal behaviors to ask for and to indicate consent, supporting the notion that across sexual orientations, a societal script for sexual consent may privilege nonverbal communication over verbal communication.

More recently, Jozkowski et al.'s (2014) qualitative study asked college students to indicate how they defined sexual consent, how they communicated and interpreted consent

and non-consent to their partners, and if/how they would vary the mechanisms used to indicate consent based on the type of sexual behavior they are engaging in. Results indicated that most college students define consent as an explicitly communicated agreement or permission giving. However, results also revealed a discrepancy: despite *defining* consent in this way, they reported often sending unclear or ambiguous messages to indicate their consent. Relatedly, when asked what actions, words, or behaviors they looked for from a partner to indicate consent or non-consent, they indicated that they look to nonverbal cues more than verbal cues. Jozkowski et al. (2014) offer several reasons for the tendency to default to looking toward nonverbal cues, including: relying on culturally-embedded sexual scripts, discomfort with asking for explicit consent out of fear of ruining the mood, and speculation that college students may expect that sex is implied unless otherwise communicated.

Additionally, in some instances, individuals do provide consent, but engage in *unwanted* sexual activity. In other words, they provide consent that is inconsistent with what they really feel and want. Walker (1997) suggests that dominant discourses imply that the male sex drive is natural and unstoppable, which may contribute to some women complying with men's desires rather than refusing sex. Indeed, in a two-week diary study of college students, half of women and a quarter of men reported consenting to unwanted sexual activity (O'Sullivan & Allgeier, 1998). Other personality factors may exacerbate the tendency to engage in unwanted sexual activity. Impett and Pepleau's (2002) study surveyed college women who had consented to unwanted sex with their dating partners and found that attachment style influenced the likelihood that they would comply with a request for unwanted sex; anxiously attached women were especially likely to consent because of fear

that their partner would lose interest. As such, errors can occur not only in the decoding of communication in a consent interaction, but also in judgments of a sexual partner's thoughts and feelings that may *not* be clearly communicated. Overall, research indicates that much of the communication in the context of sexual consent of an indirect nature and accurate interpretation is sometimes more difficult than it would seem.

Sexual scripts. The tendency for individuals to rely on sexual scripts (La France, 2010) is another compelling explanation for the frequency of misunderstandings in this context. According to script theory, culturally-dependent common social understandings allow members of a group to recognize situations and act in appropriate ways (Gagnon, 1990). Scripts are mental representations of a situation that allow an individual to predict a coherent sequence of events that will occur (Abelson, 1976) and guide attention, inferences, evaluation, behavior, and memory (Fiske & Taylor, 1991). Scripts may contain information about injunctive norms, or beliefs about how an individual should act, as well as descriptive norms, which are beliefs about how peers tend to act (Cialdini, Reno, & Kallgren, 1990). A substantial literature confirms the presence of sexual scripts: mental frameworks that dictate expectations for how a sexual encounter unfolds, and how individuals should behave (Ryan, 1988). Transmitted primarily through media and socialization, sexual scripts provide structure and predictability to the experience by prescribing who can participate, how they should communicate, and where these actions should take place (Gagnon & Simon, 1973; Metts & Spitzberg, 1996). However, overreliance on scripts may lead an individual to arrive at inaccurate inferences about their partner's thoughts and feelings, namely misperceiving their partner's sexual consent.

The traditional script of heterosexual behavior prescribes that men initiate sexual encounters, women engage in token resistance (i.e., resistance that is culturally proscribed but not reflective of actual intention to resist), and men disregard this resistance (Gagnon, 1999). Furthermore, men are stereotypically assumed to always want to engage in sexual activity, whereas the stereotype of women portrays that they will be the gatekeepers, accountable for consenting or resisting (Kim et al., 2007). As such, the use of sexual scripts prescribes certain gender-specific behaviors. Edgar and Fitzpatrick (1993) found that both male and female participants identified these behaviors when they were asked to develop a sexual script for a casual sexual encounter. More recently, La France (2010) examined individuals' scripts for cues that they interpreted as signaling interest in sexual activity. Participants were asked to read a script based on Edgar and Fitzpatrick's (1993) study, indicating the likelihood to which each behavior would or would not lead to sexual activity. Consistent with the prescription of the male role within the traditional sexual script, participants recognized that male initiation was an important cue that moved the script forward.

A key tenet to the sexual scripts perspective (e.g., Gagnon & Simon, 1973; Simon & Gagnon, 1986; Gagnon, 1999) is that sexuality is *learned* from cultural messages that define how to act in sexual encounters. For example, texts written by "pick-up artists" describe techniques for arousing women, suggesting that men should ignore women's verbal cues and interpret arousal as consent (Denes, 2011). Self-help books such as those written by pick-up artists serve as direct references to a prescribed sexual script, but influences can be indirect as well, such as observing the ways sexual encounters unfold in popular television programs.

Some work suggests that multiple types of sexual scripts may exist. Lenton and Bryan's (2005) pilot study revealed that one of two sexual scripts can be activated when asked to think about a situation where one might express sexual interest in another person: "casual sex" and "committed relationship." In the main study, participants read vignettes with some detail missing. Those who were less able to discriminate between real and imagined details of the story were also more likely to impute sexual intent to the targets. Accordingly, this study was the first to empirically demonstrate that reliance on scripts is related to increased perceptions of sexual intent, and is associated with memory errors (Lenton & Bryan, 2005). Put differently, those who rely heavily on scripts as a mental shortcut may overestimate their partner's sexual interest as well as miss social information that is not script-consistent – such as lack of communicated consent or resistance to continue with the sexual encounter. Researchers have also distinguished between rape scripts and seduction scripts, which both contain beliefs and expectations about these situations (Littleton, Axsom, & Yoder, 2006, Ryan, 1988). Another distinction in types of scripts was suggested by McDavitt and Mutchler (2014), whom conceptualized *sexual communication scripts* as the scripts about sexual communication itself. The idea is that people are not only guided by scripts about how, when and where sex should occur, but also by scripts prescribing how to talk about sex with a partner.

In sum, culturally-embedded sexual scripts serve as heuristics that guide both sexual behaviors and conversations about sex, which may contribute to misunderstandings between sexual partners. In place of direct information seeking from one's sexual partner, sexual scripts are utilized to reduce uncertainty about both the partner's desires as well as how the scene "should" unfold.

Sex differences in interpretation of sexual intent. To add complexity to an interaction where partners generally privilege the use of nonverbal cues over verbal cues and rely on sexual scripts to guide their behavior, research has found support for consistent sex differences in the interpretation of nonverbal behavior. In opposite-sex interactions, nonverbal cues that convey sexual interest such as smiling and eye contact may be difficult to distinguish from cues that convey friendliness (Haselton & Galperin, 2013). Individuals can make two types of inferential errors in estimating sexual interest: overperceiving or underperceiving actual sexual interest. In general, men tend to attribute greater sexual meaning to behavior than women intend, as evidenced by a number of studies (Abbey, 1982; Edmonson & Conger, 1995; Henningsen, Kartch, Orr, & Brown, 2009; Levesque, Nave, & Lowe, 2006). Explanations for this sex difference range from social learning, to gendered scripts guiding dating situations, to evolutionary pressure toward bias (see Farris et al., 2007 for review). Some have also suggested that this inaccuracy may be explained by men being less skilled at decoding nonverbal cues (e.g., Treat, Viken, Kruschke, & McFall, 2010), but that explanation falls short because it would implicate that men make more errors overall (both underperception and overperception), which is not empirically supported (Bendixen, 2014).

Several methodologies have documented this gender-based tendency toward misunderstanding. For example, when Vrij and Kirby (2002) asked college students to watch a muted videotape of a conversation between a man and a woman, men attributed more sexual intent to the interactants than did women. In Levesque, Nave, and Lowe's (2006) interpersonal perception study utilizing opposite sex strangers in the lab, the same oversexualization effect emerged, whereby men rated their female interaction partner's

behavior as more sexual than women rated the men. This effect has been demonstrated with participants viewing still photographs (Abbey, Cozzarelli, McLaughlin, & Harnish, 1987), reading vignettes (Abbey & Harnish, 1995), and reading descriptions of behaviors (e.g., touch on the arm) that might occur on a date (Haselton & Buss, 2000). It has also been observed in a speed-dating paradigm, where the magnitude of men's overperception of women's sexual interest was predicted by the women's physical attractiveness (Perriloux, Easton, & Buss, 2012). In Haselton and Buss' (2000) two-part study, men tended to rate a list of behaviors, such as talking to and dancing, as indicative of sexual intention, whereas women did not. However, when men were asked to imagine that the woman in the scenario was his sister, this sexual overperception was no longer evident. A meta-analysis that included 28 studies on sexual perception revealed that male raters found both women and men in opposite-sex interactions more seductive and flirtatious than female raters (La France, Henningsen, Oates, & Shaw, 2009). Finally, this effect has also been documented with respect to naturally occurring events, where women have been more likely to report that someone of the opposite sex misinterpreted friendliness as a perceived sexual come-on (Abbey, 1987; Haselton, 2003). Koenig, Kirkpatrick, and Ketalaar (2007) also found this phenomenon with opposite-sex friend pairs by comparing perceived sexual interest with actual self-reported sexual interest, whereby males overperceived their female friends' sexual interest, as well as reported greater interest in casual sex.

To be clear, some of these studies have confounded the effect of gender with the effect of self versus other ratings; men may overperceive sexual intent, but women's self-reports may be biased toward self-protection (and, therefore, sexual intent may be under-reported). However, in Farris, Treat, Viken, and McFall's (2008) meta-analysis, including

only methodologies where male and female participants rate external interactions (in which they are not participants), the mean effect size of the gender difference was moderate (d=0.63), supporting the claim that men perceive more sexual interest than women perceive in women's displays.

Unfortunately, sex differences also persist when individuals are asked to make judgments of date rape scenarios: men believe female targets are more sexually willing and more responsible for the assault than women, and that the male perpetrators are more justified (e.g., Feltey, Ainslie, & Geib, 1991). For example, Kowalski (1992) explored the interaction of verbal and nonverbal behaviors in the negotiation of sexual activity. Participants read vignettes describing a couple in which the female engaged in nonverbal behaviors that were either low, moderate or high in sexual connotation and were given information about her verbal response ("no," "no" with a slap, or no information), and the outcome (no forced sex or forced sex). Results supported findings from other studies indicating that men have a lower threshold for attributing sexual meaning to behavior, perceiving behaviors low in sexual connotation more sexually compared to women. Men also rated the woman's flirtatiousness and promiscuity higher than women when her nonverbal behaviors connoted *little* interest in sex. When nonverbal behaviors were unambiguously sexual, sex differences did not emerge. Importantly, this study also found that when verbal and nonverbal behaviors were inconsistent, observers attributed *more* responsibility to her for a forced sexual encounter – a tendency that may play a role in the spread of rape myths (Kowalski, 1992).

With respect to the communication of consent, sex differences have also emerged in empirical work. Although men and women similarly defined sexual consent in Jozkowski et

al.'s (2014) study, there were differences in how students *interpreted* consent and non-consent from partners. Men were more likely than women to rely on nonverbal cues to communicate and interpret consent and non-consent, and conversely, women were more likely than men to rely on verbal cues to communicate and interpret consent and non-consent. The novel focus on non-consent in this study is an imperative element to understanding sexual assault, given that misunderstood or unrecognized non-consent could lead to unwanted sexual activity. In terms of sex differences, women reported that they would indicate non-consent verbally, but men expected to look for nonverbal cues. Together, these studies suggest the possibility that men's interpretation of women's consent or non-consent may sometimes be inaccurate, where men erroneously assume that consent has been granted.

Evolutionary Pressure: Error Management Theory

A compelling theoretical explanation for this sex difference in interpreting sexual interest emerges from Error Management Theory, which is rooted in Evolutionary Theory. Broadly, and as identified by a number of interdisciplinary studies and across domains (see Johnson, Blumstein, Fowler, & Haselton, 2013 for review), the principle of error management suggests that natural selection has engineered cognitive or behavioral biases exist that help individuals avoid a more catastrophic error in favor of committing a less costly error. According to this principle, when there are asymmetric costs of 'false positive' (e.g., a stick is wrongly judged as a snake) and 'false negative' (e.g., a snake is wrongly judged to be a stick) errors, a directional bias can improve decision making under conditions of uncertainty. If the bias helps maximize one's chance of survival and reproduction, it is considered adaptively rational (Johnson et al., 2013). In sum, a bias will evolve in human judgment if it: (a) has consistent impacts on reproductive success, (b) the decision is made

under conditions of uncertainty, and (c) the possible errors associated with that judgment are asymmetrical over evolutionary time.

More specifically in terms of social cognition, Error Management Theory (EMT) suggests that a bias toward sexual overperception developed for men because the costs of a missed sexual opportunity outweigh the costs of a false alarm for men, but not for women (Haselton & Buss, 2000; Haselton & Nettle, 2006). EMT purports that cognitive and behavioral biases developed over evolutionary history because overperceiving sexual interest generally resulted in increases in men's reproductive success. Natural selection has thus engineered an adaptation for judgment under conditions of uncertainty that minimizes the cost of making reproductively costly errors, and this adaptation is in the form of biases in judgments of sexual interest. In other words, this sexual overperception bias has historically helped minimize missed mating opportunities for men.

From this perspective, Type II errors (i.e., false negatives) are more reproductively costly than Type I errors (i.e., false positives) for men. Research suggests that women also possess a sexual underperception bias (Haselton & Buss, 2000; Buss, 2003). For example, in Perilloux, Easton, and Buss' (2012) speed-dating paradigm, women's inferences about their male partners' sexual interest was lower than their actual self-reported interest. This bias occurs because the cost of overestimating commitment (i.e., having sex with a partner who is not interested in a long-term relationship) is more costly to a woman than to a man. Pregnancy without support and resources could result from a false negative, whereas the less problematic situation of a delayed pregnancy and more time to assess a man's commitment results from a false positive (Haselton & Galperin, 2012). In addition, the costs of a missed mating opportunity as a result of not perceiving sexual interest are low for women because of

the historical abundance of males willing to mate (Buss, 2012). Henningsen and Henningsen (2010) found support for sex differences consistent with EMT in a face-to-face lab study, but also found that self-reported levels of sexual interest and commitment predicted their perceptions of their partners' sexual interest and commitment. Thus, men's sexual overperception and women's undercommitment biases rooted in evolutionary history may be complemented by other biases, such as projection.

However, it is important to note that some work suggests that when a sexual boundary is clearly communicated (as opposed to interpreting ambiguous nonverbal cues), sex differences may not emerge. In Winslett and Gross' (2008) study, participants listened to an audio recording of a date rape vignette and were asked to signal when the man should stop making sexual advances. Those in the condition who heard a discussion about sexual boundaries prior to the physical contact in the vignette (versus those who did not) took significantly shorter time to identify when the man should stop. There were no significant differences between male and female participants. Importantly, this study also points to the significance of the conversation prior to physical contact in clarifying boundaries and consent to proceed. Overall, work on EMT points to a difficult challenge in conversations about sexual consent: that men and women possess cognitive biases that encourage them to misunderstand one another's true intentions.

Merging theoretical perspectives. To summarize thus far, conversations in sexual contexts are complex in nature for several reasons. First, in an attempt to save face as well as gauge what the other person is thinking about a very intimate experience (physically, emotionally, and relationally), interactants overwhelmingly communicate in indirect, as opposed to direct, ways. As an example, nonverbal cues are often privileged over verbal

cues, which are generally, although not always, more difficult to interpret than direct verbal cues. Second, research has documented sex differences in the interpretation of sexual intent in interactions: men tend to overperceive sexual intent, and women tend to underperceive sexual intent in opposite-sex interactions.

Two theoretical reasons why this bias occurs are found in sexual script theory and in Error Management Theory, respectively. Sexual Script Theory (rooted in script theory) suggests that culturally-learned schemas provide gendered prescriptions for how men and women should and should not act in relationships, as well as in terms of sexual activity. From a different perspective, EMT situates this sexual overperception bias by men as one that, across our evolutionary history, helped avoid the reproductively costly error of a missed mating opportunity. Thus, it is seen as a cognitive heuristic engineered by natural selection that is advantageous because the costs of a missed mating opportunity (i.e., the result of underperceiving a woman's sexual interest) are greater than the cost of a false alarm for men than for women (i.e., the result of overperceiving a woman's sexual interest when it is not present). Because of this bias and the tendency for conversations in sexual contexts to be characterized by indirectness and nonverbal communication, it is apparent how relational partners can misunderstand one another. However, what is less understood is how – and when – communication about consent unfolds, and what the implications of such communication are for the experience of unwanted sexual activity. This dissertation will move us forward in those domains by relying on work in the areas of interpersonal perception (specifically, empathic accuracy) and uncertainty management.

Two theoretical frameworks will be combined toward a set of predictions that encompass the aforementioned difficulties in conversations of this nature. First, the Theory

of Motivated Information Management (TMIM; Afifi & Weiner, 2004) will be used to outline the process by which individuals decide to engage in or avoid an information search about sexual consent. Next, the Empathic Accuracy Model (Ickes & Simpson, 1997) will be used to explicate the process by which individuals make inferences about their partner's perspective – a perspective which, accurate or not, influences their subsequent physical (i.e., sexual) actions. However, paramount to the process of arriving at various inferences that drive those actions is whether or not (direct or indirect) information seeking regarding the partner's thoughts and feelings occurs. As such, the Empathic Accuracy Model will help extend the application of TMIM to a very specific context, sexual consent interactions. Given that uncertainty is undoubtedly embedded in conversations of this nature, and that difficulties in inferring the other person's perspective are complicated by a number of factors, these two theoretical frameworks are well situated to explain why and how misunderstanding of sexual consent occurs.

Sexual Consen(sus) Building: Uncertainty Management

Theory of Motivated Information Management. While early models of uncertainty purported that individuals are motivated by a desire to constantly reduce uncertainty (Berger & Calabrese, 1975), subsequent frameworks unveiled that individuals are sometimes motivated to maintain or even increase uncertainty (Babrow, 2001; Brashers, 2001). Central to the process of reducing, maintaining, or increasing one's uncertainty is the management of information. Indeed, in the context of negotiating sexual consent, individuals are faced with varying levels of uncertainty about their partner's sexual interest, and can choose whether or not to initiate a conversation with their partner – as well as how directly or indirectly to do so. Afifi and Weiner's (2004) Theory of Motivated Information

Management (TMIM) and subsequent updates (Afifi & Morse, 2009) heuristically capture the mechanisms by which the experience of uncertainty leads to information management decisions. The theory outlines a three-phase process (represented by interpretation, evaluation, and decision phases) that stresses the role of efficacy as an important part of the decision of an appropriate information-management strategy, as well as the roles of both the information seeker and the information provider. Additionally, this theory stresses that expectations should motivate behavioral decisions. Overall, TMIM was developed to increase predictive precision in individuals' diverse responses to uncertainty.

TMIM's framework serves a useful purpose in the current study for a number of reasons. First, consent conversations are, in essence, a strategic information exchange designed to achieve some level of (un)certainty. TMIM can also help explain situations in which consent conversations do *not* occur. Additionally, this theory's focus on the interplay between cognition (i.e., perceptions of efficacy and outcome expectancies) and communication (i.e., information seeking) makes it well-suited to integrate with theoretical perspectives identifying biased cognition as well as empathic accuracy, which is focused on how individuals arrive at perceptions of others' thoughts and feelings. First, a summary of the theory provides the base for subsequent theoretical advancement.

Interpretation phase. In the first phase, labeled the interpretation phase, individuals are aware that they desire more or less uncertainty than they currently have about an important issue. In other words, individuals may want to decrease *or* increase their current level of uncertainty. This is a departure from earlier work on uncertainty (Berger & Calabrese, 1975), which suggested that people are always motivated to reduce their uncertainty. Any difference in the amount of uncertainty a person wants and has should

initiate the process of managing that discrepancy. In the original theory proposed by Afifi and Weiner (2004), the difference between wants and needs was purported to lead to anxiety. A revised version of TMIM (Afifi & Morse, 2009) proposed that while anxiety is the most typical emotion produced by the discrepancy, it is also possible to experience this discrepancy as hope, anger, or another emotion, depending upon the emotional appraisal of that uncertainty discrepancy. Uncertainty is commonly experienced as anxiety, but can also be experienced as hope, such as when a poor health prognosis is not accepted as a certain destiny (Brashers, 2001). The greater the discrepancy, the more intense the emotion will be experienced.

Evaluation phase. The emotional response propels the second phase, or the evaluation phase, where individuals assess expectations about the outcomes of the search (labeled outcome expectancy) as well as their ability to accomplish the information search and cope with the information (labeled efficacy). Outcome expectancies, or beliefs about what may result from the information search, are comprised of cost/benefit analyses of both process-related expectancies and results expectancies. Process-based expectancies are assessments about the risks and rewards of the *act* of seeking the information. For example, costs associated with asking for information could include face and identity concerns, money, embarrassment, and stigmatization. A common process-related cost associated with seeking information before sex is fear of ruining the mood (Jozkowski et al., 2014).

Individuals also make judgments about the risks and rewards of gaining the information itself: it could confirm one's suspicions about one's partner, or it might provide reassurance of his/her commitment. In the context of sexual consent, the information search could be positive if that person consents to engage in sexual activity, or negative if he or she

does not consent, or is angry, confused, or surprised by the conversation itself. It might also reveal information about the type of sexual activity that he/she is comfortable with that may or may not align with the information seeker's expectations. Potential information seekers predict what they view as the outcome they most expect to occur. The results-based expectancies also consider outcome importance and outcome probability in the analysis. These two types of outcome expectancies contribute to the cost/benefit analysis that helps determine the information seeking strategy, but the influence of outcome expectancy on the decision is mediated by efficacy assessments (Afifi & Weiner, 2004).

The evaluation phase has an additional component: after weighing the costs and benefits of expected outcomes, individuals make decisions about whether they both have the ability to gather the information and cope with it. The model purports that efficacy assessments are partially the function of outcome assessments, which are formed first and subsequently influence efficacy. TMIM predicts that the more negative the expectations of the outcomes of the search, the less efficacious that person will feel about his or her ability to seek that information. For example, the more an individual suspects that she will be disappointed by the partner's response (such as refusing to engage in a sexual act), the less able the individual will feel about actually asking the question (i.e., the lower one's assessment of efficacy).

There are three types of efficacy that can influence information seeking behaviors: communication efficacy, target efficacy, and coping efficacy. Communication efficacy refers to the extent to which individuals believe they are equipped with the communication skills necessary to obtain the information. For example, communication efficacy has been found to predict individuals' information seeking efforts regarding their family's organ

donation beliefs (Afifi et al., 2006). In the current study, people might avoid seeking the information altogether if they do not feel comfortable bringing up the topic of sex and consent. Additionally, target efficacy is considered, which is a perception of whether the information-provider is willing and able to provide accurate information. Finally, coping efficacy refers to the extent to which individuals believe they have the resources (emotional, instrumental, etcetera) to deal with the process and the outcomes of their information management strategy.

Importantly, the strength of efficacy as a mediator depends on whether the expectancies are positive or negative. That is, if one expects positive outcomes from an information-seeking strategy, efficacy assessments should not impact the process heavily – he or she will likely seek the information regardless. When the outcome expectancies are negative, though, efficacy will play a greater role in the decision to seek/not seek information. Some research on individual differences, however, suggests that efficacy may not influence the decision to seek or avoid potentially negative information equally for everyone (e.g., Ickes, Dugosh, Simpson, & Wilson, 2003).

Decision phase. Finally, in the third (decision) phase, these expectations and assessments culminate in a decision of an information-management strategy. In other words, once individuals move through the interpretation and evaluation phases, they decide how to manage their uncertainty in the form of information-management strategies. Individuals should be less likely to seek information when they expect negative outcomes or have low levels of efficacy. An individual can select among three general strategies to manage the uncertainty: seek information, avoid it, or cognitively reappraise the situation. This also involves considering the efficiency and appropriateness of the relative options. More

specifically, one might decide to directly seek the information (by directly asking the other person), indirectly seeking the information (by being verbally indirect or asking someone other than the source), active avoidance (avoiding any information on the topic), or passive avoidance (not avoiding but not seeking information). In a cognitive reappraisal, the information itself is reframed in a way that it is less important or less troublesome, removing the need for uncertainty management altogether (Afifi & Weiner, 2004).

This ends the process for the information seeker, but the theory also recognizes the role of the information provider in the process of uncertainty management. Information providers (i.e., those who are asked for certain information) are thought to move through a similar process, but just including the evaluation and decision phases. As such, when prompted to provide information, they assess their own communication efficacy, coping efficacy, and whether he/she believes the target can handle the information (target efficacy). Although the information provider is an imperative part of this dyadic exchange, the current study focuses on the perspective of the information seeker (i.e., the person potentially seeking consent from a partner).

In sum, having more or less uncertainty than one wants produces anxiety about that discrepancy. Anxiety (or other emotion) then affects assessments in the evaluation phase regarding expectations of the information search (i.e., outcome expectancies) and efficacy judgments. These efficacy judgments, in conjunction with the outcome expectancies, influence the decision about how an individual will manage the uncertainty through an information management strategy. Therefore, the more discrepant an individual is (in terms of how much uncertainty s/he has and how much s/he wants), the *less* likely s/he will be to seek information. This occurs because a large discrepancy results in higher levels of anxiety;

this anxiety negatively affects perceptions of outcomes and efficacy. Specifically, the more anxiety that is experienced, the more costly an individual will believe the process of obtaining the information will be, and the more negative an individual's perception of the content of what s/he will find will be. Additionally, the more anxiety that is experienced, the less efficacious an individual is likely to feel about: his/her ability to cope with the outcomes, his/her ability to obtain the information, and the target's ability to provide accurate information on the desired topic.

TMIM has been applied to a number of contexts (for review, see Afifi & Robbins, 2014), including college students' search for information about their romantic partners generally (Afifi, Dillow, & Morse, 2004) as well as about their sexual health (Afifi & Weiner, 2006). It has also been utilized to predict conversations about organ donation with next-of-kin (Afifi et al., 2006), information seeking about parents' caregiving wishes (Fowler & Afifi, 2011), discussions about sexual assault with one's friends (Potocki, 2013), and seeking information about family health history (Rauscher & Hesse, (2014). Other studies have focused primarily on the assessments made in the evaluation phase (e.g., Jang & Tiang, 2012; Morse et al., 2013). As a whole, TMIM has been shown to be particularly applicable to information management related to sensitive health issues, with the roles of anxiety and efficacy being particularly important.

The theory provides a coherent explanation for why sometimes individuals desire, for example, to reduce their uncertainty about their relational partners, but choose to avoid obtaining information instead. Indeed, seeking information has clear benefits in many instances, but also poses a number of risks (T. D. Afifi & Afifi, 2009). Individuals may not seek information because they feel they will not be effective at asking for the information or

they cannot cope with the information once they receive it, particularly when they believe that the information will be negative. The cascading effect of expecting to discover something negative sometimes motivates individuals to misunderstand their partners (Sillars, 2011), or maintain inaccurate perceptions of their thoughts or feelings in order to avoid potential pain (Ickes & Simpson, 2001). These situations are prime examples of motivated information management: deliberately avoiding being certain about an outcome that might be unpleasant or difficult to cope with. Individuals will be more likely to follow through with an information seeking strategy if the issue is important to them, anxiety about the uncertainty discrepancy is low, the expected outcome is positive, and they feel highly efficacious (Afifi, Dillow, & Morse, 2004).

In the current context, the "uncertainty" behind the uncertainty discrepancy may represent uncertainty about one's partner's desire to engage in a particular sexual act or set of acts, as well as what sexual acts he/she will or will not consent to (i.e., the content of his/her thoughts and feelings). Experiencing a discrepancy between current and desired levels of uncertainty should influence subsequent interactions.

Risk for misunderstanding partner's consent. Returning to the context of sexual consent, information seeking behaviors are of interest because they may predict situations in which unwanted sexual encounters may be more likely to occur. Whether or not a conversation about sexual consent occurs at all, and if so, how direct or indirect the information seeking should impact the extent to which the partner's perspective (i.e., whether or not he/she consents to sexual activity, and to what he/she consents to) is accurately understood. In other words, information-seeking strategies in this context are impactful insofar as they impede or facilitate one person accurately understanding the desires of the

other person. Furthermore, how accurate a perceiver/information seeker is regarding his/her partner's consent likely has a profound impact on the actions that may follow those inferences: mutually desired sexual experiences versus unwanted sexual experiences/sexual assault. In other words, erroneously inferring that one's partner is consenting to sexual activity when he/she actually does not consent is a form of misunderstanding that is particularly problematic.

Figure 1 (p. 142) illustrates the potential outcomes of accurate versus inaccurate inferences in the context of sexual consent. To be clear, inaccuracy and accuracy are, practically speaking, opposite poles on continuum, but for simplicity and illustration are treated as discrete outcomes here. The outcomes depend primarily on: the perceiver's meta-perspective (what he/she thinks about whether the partner consents or not), the target's direct perspective (his/her actual thoughts) and whether the perceiver infers that his/her partner consents ('yes') or not ('no'). Thus, the (in)accuracy of one's meta-perceptions should influence the behaviors (or lack thereof) that follow. Each quadrant represents a different scenario depending on the aforementioned variables. To be clear, the quadrant delineates a "perceiver" from a "target," but interpersonal perception is, of course, a dyadic and ongoing process. Interaction partners are simultaneously perceivers and targets.

Briefly, quadrant I represents a situation where the target consents to sexual activity and the perceiver infers this correctly. Therefore, the perceiver's inference is accurate. A possible outcome of this situation is that the dyad will engage in wanted, mutually beneficial sexual activity. Quadrant II represents a situation where the target consents to sexual activity, but the perceiver infers that he/she has not consented. The perceiver has arrived at a false negative (type II error). A possible outcome of this situation is that sexual activity does

not occur. Quadrant IV represents situation where the target does not consent to sexual activity and the perceiver accurately infers this. The perceiver's perception is accurate. A likely outcome of this situation is that no sexual activity will occur. Quadrant III represents a situation where the target does not consent to sexual activity and the perceiver erroneously infers that he/she has consented. This inferential error is the most problematic, as it puts the interactants at risk for engaging in sex that is unwanted by one party. Based on the literature discussed above with respect to error management theory and sexual scripts, this situation should most commonly occur with the female's thoughts and feelings being misunderstood by the male (in heterosexual relationships). Among the situations depicted by the quadrants, the situation represented by quadrant III has the greatest risk for the occurrence of unwanted sex.

The quadrants focus on the potential outcomes of interpersonal perceptions. However, the quantity and quality of the information available for a perceiver to make inferences about a partner's perspective undoubtedly depends on if and how (direct) information seeking takes place. As such, TMIM offers insight into the process through which information is known to the perceiver via uncertainty management efforts. Next, TMIM will be utilized to explicate how a particular experience can unfold communicatively. In the current study, TMIM will be tested using a dyadic frame, with the specific hypotheses detailed in the next section. To preview, Figure 2 (p. 143) displays a simplified model of the TMIM hypotheses without the dyadic paths; Figure 3 (p. 144) shows the full hypothesized model (detailed below).

CHAPTER THREE

HYPOTHESES

TMIM

Interpretation phase. TMIM purports that the process of uncertainty management is initiated by an individual's awareness of a difference between how much uncertainty he/she desires (about a partner's consent to sex) and how much uncertainty he/she currently has. A number of possibilities exist in this realm. One might experience no uncertainty discrepancy; that is, he/she feels certain about his/her partner's perspective (perhaps that the partner consents to sex). Alternatively, he/she could feel very uncertain about whether a partner would consent, but is not bothered by this; no uncertainty discrepancy exists in this situation. We might expect that, even in the absence of any communication with the partner about his/her wishes, some rapists might fall into this category – they feel uncertain, but they are not motivated to reduce this uncertainty. Individuals might also experience a low uncertainty discrepancy; perhaps they feel relatively sure but not certain that their partner consents (or does not) consent to sex, and they wish to be more certain. A large uncertainty discrepancy would mean that the individual is much more or much less uncertain than he/she wishes to be; this person might feel that he/she has no insight into the partner's inner thoughts and feelings about sex. One could also experience a moderate uncertainty discrepancy where he/she wishes to be more or less uncertain about the partner's perspective. In sum, individuals might experience no uncertainty discrepancy, low, moderate, or high levels of uncertainty discrepancy. In line with the original TMIM prediction, the following hypothesis is advanced:

H1: An uncertainty discrepancy regarding a sexual partner's consent is positively associated with the experience of emotion (most typically anxiety).

Evaluation phase. The experience of anxiety (or other emotion) influences the evaluation phase. In the evaluation phase, TMIM predicts that (a) outcome expectancy and efficacy mediate the influence of uncertainty-discrepancy emotion on information seeking, and that (b) efficacy partially mediates the influence of outcome expectancy on information seeking. As discussed above, the path predictions are as follows:

H2a: Anxiety is negatively associated with outcome expectancies.

H2b: Anxiety is negatively associated with perceptions of efficacy.

H3: Outcome expectancies are positively associated with perceptions of efficacy.

Decision phase. According to TMIM, those who experience a high level of uncertainty discrepancy will be the least likely to seek information from their partner (i.e., will forgo the information search altogether or seek in indirect ways). This is because a large uncertainty discrepancy should lead to the most negative outcome expectancies and lowest levels of efficacy, which result in the information search being too difficult or costly to carry out. However, the current study takes a slight departure from the predictions laid out by TMIM when comparing those who experience low uncertainty discrepancies and those who experience moderate uncertainty discrepancies. TMIM would suggest that the smaller the uncertainty discrepancy, the more likely the individual should engage in a direct information search, as a result of relatively positive outcome expectancies and higher efficacy. Instead, the current study explores the possibility that those who experience low levels of uncertainty discrepancy may forgo the information search not because they do not feel efficacious to carry it out, but because they can rely on sexual scripts (as discussed above) as a heuristic.

This allows them to thwart the process-related costs to direct information seeking, which are, generally speaking, high in this context. Individuals face potential relational or sexual rejection, the possibility of non-reciprocation, disappointment, anger, or even more uncertainty if a partner responds in an unexpected way. Relying on scripts serves as a way to manage one's uncertainty while avoiding the costs of direct information seeking. Together, this rationale leads to the following hypothesis:

H4: Those who experience a moderate level of uncertainty discrepancy about a partner's interest in a particular sexual act will be the most likely to directly seek information from their partners, followed by those who experience low and high levels of uncertainty discrepancy (i.e., a quadratic relationship exists between uncertainty discrepancy and information seeking).

As outlined in TMIM, perceptions of efficacy should remain an imperative aspect of the model in this context. Especially because costs of information seeking are high, communication efficacy, or the extent to which people feel like they can ask the right questions to obtain the information needed, should be particularly important. Additionally, whether or not the information provider will be willing and open with the information requested is considered (i.e., target efficacy), as well as whether the person has the resources to handle the outcomes of asking the questions (i.e., coping efficacy). In such a context where individuals feel so personally vulnerable, especially in the early stages of relationships, efficacy should play a role in whether consent is actively sought or, alternatively, avoided:

H5: Perceptions of efficacy are positively associated with information seeking.

Next, work on empathic accuracy will be used to explain how individuals arrive at inferences about their partner's perspective that drive their behavior. In doing so, it will extend TMIM beyond information seeking to predictions about how information seeking efforts should affect empathic accuracy, which should affect behavior. As noted by Afifi and Morse (2009), "we know relatively little about the consequences of information seeking as response to uncertainty discrepancy" (p. 105). Understanding of the TMIM model will be expanded by examining how it relates to the additional variables of empathic accuracy and the outcome variable of interest: (non)consensual sex.

Empathic Accuracy in Consent Conversations

Given the evidence that individuals misunderstand one another's sexual interest and, in some cases, whether consent to engage in sexual activity has been granted, this issue is both a communication problem and a problem of inferring the internal states of others – an area of study referred to as interpersonal perception. It is difficult to imagine social life without the skill of interpreting the behavior of others. In any given interaction, communicators rely on various cues, including speech, facial and body movements, tone, dress, and relational history, to inform them of others' perspectives, attitudes, emotions, thoughts, and personality. As noted above, sexual consent interactions are likely characterized by limited, or at least indirect, cues. Additionally, social judgments are made under conditions of uncertainty, given that one can never really know with certainty what exists in the minds of others.

Even so, humans perform this task of understanding others' minds regularly and with remarkable ease. Perceivers rely on the limited observable information provided by contextual cues and verbal and nonverbal communication to estimate a target's cognitions

(Zaki & Oschner, 2011). The task of attempting to infer other people's thoughts and feelings, which people are engaging in very often during their day-to-day lives, is referred to as *empathic inference*. Those who are more successful at utilizing available cues to extract correct information about other are said to be skilled in achieving *empathic accuracy*, or the extent to which individuals can accurately infer each others' thoughts and feelings in a given interaction (Ickes, 1993). Put differently, empathically accurate perceivers are good at "reading" other people.

The study of empathic accuracy was born out of the larger interpersonal construct known as *person perception*, which refers to judgments of others' thoughts, emotions, personality, status, and intentions (Blanch-Hartigan, Andrzejewski, & Hill, 2012). Four main areas of research characterize the study of empathic accuracy (see Ickes, 1993 for review). One area of study is perceivers' accuracy in making inferences about personality traits (componential accuracy), which is accomplished by examining interrater consensus. A second focus of empathic accuracy research has been on dyad members' perceptions of each others' attitudes, values, and self-conceptions, which is studied by comparing individuals' direct perspectives to meta-perspectives. Third, empathic accuracy research can focus on perceivers' ability to understand the emotions of others. Finally, this area of study can focus on the ability to accurately infer the specific content of transient states by identifying individuals' thoughts and feelings.

Empathic accuracy has also been referred to by other names in the literature, including *mindreading* (Ickes, 2003), *mind perception* (Zaki & Oschner, 2011) and *interpersonal sensitivity* (Hall, Andrzejewski, & Yopchick, 2009). Achieving a high level of empathic accuracy requires a combination of observation, memory, knowledge, and

reasoning to yield these insights (Ickes, 1993). Empathic accuracy plays a critical role in managing interpersonal relationships, given that these inferences are used to form impressions and guide one's behaviors and decisions in a given interaction – such as to engage in sexual activity. For this reason, empathic accuracy is considered a necessary prerequisite for effective and appropriate communication (Gleason, Jenson-Campbell, & Ickes, 2009).

Empathic accuracy has wide implications for communication and relational development. Accurately recognizing and identifying emotions in others is an important aspect of being an effective communicator (Hall & Bernieri, 2001). Indeed, greater empathic accuracy in everyday interactions allows individuals to better understand one another, facilitating better quality instrumental support (Verhofstadt et al., 2008). A meta-analytic review revealed that empathic accuracy is positively associated with social competence, relationship quality, and other psychosocial characteristics (Hall, Andrzewski, & Yopchik, 2009). Conversely, lower person perception skills have been linked to a host of negative outcomes, such as lower self-esteem and increased depression (McClure & Nowicki, 2001). In conflict, lower empathic accuracy is associated with higher levels of aggression by both partners (Cohen, Shulz, Liu, Halassa, & Waldinger, 2014). Indeed, having a correct understanding of a romantic partner's perspectives allows for more effective interactions and can enhance relational stability, as long as that information is not anticipated to be detrimental (Ickes & Simpson, 2001). Many studies have found that accurately understanding attitudes and perceptions of one's spouse was positively associated with marital adjustment (e.g., Ickes & Simpson, 1997).

Empathic accuracy has been measured in a number of different ways (see Ickes & Hodges, 2013 for review). The original technique for measuring empathic accuracy was established by Ickes and colleagues and utilizes what they call the *unstructured dyadic interaction paradigm* (Ickes, Stinson, Bissonnette, & Garcia, 1990). Briefly, this methodology requires two individuals to come to the lab and engage in an interaction, after which they are separated. In separate rooms, the participants watch the video of their previous interaction, which is paused at specific intervals. While the video is paused, participants record their specific thoughts and feelings that they remember from that particular segment of the conversation. Next, they record their inferences about their partner's thoughts and feelings during those same segments. After data collection, trained coders rate the content of the inferred thought or feeling (meta-perspective) for how closely it aligns with the actual thought or feeling (direct perspective), which enables calculation of an accuracy score. This score represents a percent correct measure of accuracy.

Another method includes the *standard stimulus paradigm* (Marangoni, Garcia, Ickes, & Teng, 1995) in which participants are asked to watch pre-recorded dyadic interactions of others and infer their thoughts and feelings, rather than their own interaction. This enables the researcher to vary the target persons in order to see how variables such as readability of the target affect or individual variables (e.g., motivation, personality, etc.) affect accuracy performance. Researchers can also compare performances between participants, given that all the perceivers are viewing the same set of stimuli. In the standard interview paradigm, participants watch a video of a target person being asked a set of questions. The video is paused just before the person answers each question, and the participant is asked to record what he or she thinks the target will say, which is later compared to the direct responses.

Finally, empathic accuracy has also been assessed using diary methods. For example, Howland and Rafaeli (2010) asked participants to record their own moods and their estimation of their partner's mood twice a day for three weeks, enabling an examination of day and person-level patterns of accuracy.

Although social judgments are an important task in our interpersonal relationships and a ubiquitous occurrence, human attempts at person perception are far from perfect. Ickes' (2011) meta-analysis found that total strangers achieve empathic accuracy scores of about 20%, close friends achieve about 30%, and marriage partners only about 30-35%. Despite actual accuracy this low, individuals tend to display overconfidence in their ability to understand their relational partners (Kenny & Acitelli, 2001; Sillars & Scott, 1983; Roggensack & Sillars, 2014), evidence that they lack accurate meta-awareness of deficits in their own mindreading abilities (Ickes, 1993). In one study where participants were asked to rate how accurate they *thought* they were inference-by-inference, the average meta-knowledge correlation was negative and nonsignificant (Mortimer, 1996).

Studies have documented this overconfidence bias with respect to partner sexual risk perceptions. For example, Swann and Gill (1997) observed that as relationship length and involvement increased, dating partners' confidence in their knowledge about their partner's sexual history increased – but that this confidence did not predict accuracy on this front. The evidence suggests that people are not as skilled at reading other people's minds as they believe themselves to be, a problem which persists – and which is particularly critical – in consent interactions. A useful starting place for understanding the role of empathic accuracy within sexual encounters is to know how confident individuals are in their judgments regarding whether they have obtained consent from their sexual partners:

RQ1: How confident are individuals regarding their ability to discern whether they have obtained sexual consent from their partner?

In general, empathic accuracy promotes stability and happiness in relationships (Ickes, 2003). As such, in normal interactions where no threat exists, relational partners should be highly motivated to accurately infer each other's thoughts and feelings (Ickes & Simpson, 1997, 2001). However, there are a number of factors that affect one's ability to achieve empathic accuracy, including the perceiver's motivation to be attuned to the target, inferential biases, and the expressiveness of the target. While motivation alone does not ensure accuracy, research has found that motivation to make accurate inferences is positively related to accuracy, even when typical ability is held constant (Ickes, Gesn, & Grahm, 2000). Presumably, in everyday mundane discourse, relational partners are motivated to correctly understand one another.

Under some conditions, though, accuracy can be detrimental for relationships. Certain relational goals can shift a perceiver's motivation away from accuracy when the target is perceived as having relationship-threatening thoughts, or perceives the relationship to be in danger (Ickes & Simpson, 1997, 2001). In these cases, accuracy might unveil a target's negative thoughts about the relationship, whereas inaccuracy may lead to more positive feelings. As a result, individuals may actually aim to be less accurate to avoid what they sense could be a "danger zone." The exception is that in particular situations such as conflict interactions, heightened accuracy unveils thoughts and feelings that threaten the stability of the relationship or present a new relational obstacle that requires coping resources (Sillars, 1985; Simpson et al., 1995, 2003).

The Empathic Accuracy Model (Ickes & Simpson, 1997, 2001) sought to explain why accuracy performances might vary with respect to these seemingly contradictory findings – that accuracy can be crucial for relationship development, but can also be painful and destabilizing to a relationship. The model of information processing within relationships specifies when perceivers will attempt to accurately versus inaccurately infer their partner's thoughts and feelings. Specifically, it proposes that a perceiver's accuracy will be influenced by three factors: (a) whether the partner's thoughts and feelings are perceived as likely to cause the perceiver distress, (b) the clarity or ambiguity of the cues that signal those thoughts and feelings, and (c) the extent to which the perceiver feels threatened by the potential consequences of accurate inferences.

These potentially threatening situations may motivate individuals to change their behavior or shift their attention in a way that affects their ability to be accurate, either by becoming more vigilant or less perceptive. People might strategically avoid certain topics if they believe that cues to a painful insight might surface, preserving their self-esteem or even the relationship itself (Ickes, Dugosh, Simpson, & Wilson, 2003). For example, an individual who wants to believe his partner is very committed is motivated to maintain that perception and therefore may ignore, dismiss, or downplay cues that challenge this perspective. This shift from an inferential accuracy set to a motivated inaccuracy set allows individuals to strategically avoid information that would be needed to correctly infer the contents of another's mind (Cuperman, Howland, Ickes & Simpson, 2011; Ickes & Simpson, 1997, 2001).

Research supports the idea that *less* accuracy in relationship-threatening situations serves a protective function and is associated with increased feelings of closeness and

relationship satisfaction (Kilpatrick, Bissonnette, & Rusbult, 2002). Using the unstructured dyadic interaction paradigm, Simpson, Orina and Ickes (2003) also found that less accuracy was related to greater feelings of closeness and satisfaction when the partner's thoughts or feelings were threatening to the relationship. Perceivers might, for example, assume that their partner's thoughts are less negative than they really are, and this inaccurate inference shields them from experiencing the consequences of accuracy – such as dealing with a partner's negative emotions or their own experience of jealousy or anger. In sum, motivated inaccuracy is used strategically in relationships and can serve a protective function, activated under certain conditions of threat. However, inaccurate inferences in the context of pre-sex consent interactions are clearly problematic.

Sillars has focused research attention on how and why individuals in conflict (especially ongoing conflicts) can derive such divergent inferences from the same interaction. From his perspective, "…'motivated misunderstanding' reflects goal-directed sense-making – how goals determine the selection of cues assumed to reveal another's thoughts or intentions and assist in fitting these into a meaningful context" (Sillars, 2011, p. 209). As such, individuals construct an account of what their partner is thinking and feeling in ways that help manage their uncertainty and to explain events to oneself and to others. Additionally, in the context of conflict, cognitive demands may be limited due to high stress, which makes it difficult to process complex thoughts and competing goals present in the interaction (Caughlin & Scott, 2010). As a result of cognitive demands, individuals select limited potentially relevant cues (among many), which can lead them astray in their inference-making (Sillars, 2011).

While a discussion of consent is not a conflict per se, it indeed shares many of the same characteristics Sillars highlights with respect to conflict interactions: high stress (for some individuals), and potentially competing goals (e.g., wanting to respect one's partner's choices while satisfying one's own desires; wanting stability in the relationship while wanting change through increased intimacy, etc.). In this way, consent misunderstandings may also reflect goal-directed sensemaking. Thus, inaccurately perceiving consent may sometimes be a manifestation of motivated misunderstanding that facilitates individual and relational goals. As highlighted above, individuals have the tendency to rely on sexual scripts and perceive their partner's behavior in sex-stereotypical ways, strategies that propel them toward those goals. These heuristic tendencies, in conjunction with the likely possibility that the perceiver feels threatened by learning his/her partner's desires (consent or lack thereof) should lead to a "dialing down" of accuracy. In particular, it is reasonable to suspect that the more uncertain an individual feels in a given sexual situation, the more he/she will rely upon these heuristics (and the less likely he/she will directly seek information). In doing so, the need for information seeking (e.g., asking for clarity regarding what sexual act is permissible and desired) is eliminated: heuristics now provide the information needed to interpret one's partner's behavior. Put differently, they may ignore resistance cues or other communication from the partner (which is likely indirect to start) and fail to seek information because heuristics fill that need, and because their *attention is limited to selecting cues that support their own goals*.

It is not unreasonable to presume that interactants might view conversations about sexual consent as "potentially threatening situations." Returning to the Empathic Accuracy Model (Ickes & Simpson, 1997), accuracy is thought to vary if the target's thoughts and

feelings are *perceived* to be distressing. More specifically, and with respect to TMIM, one might conjure up negative outcome expectancies either about the *results* of the information search or about the *process* of seeking the information. In consent interactions, there are several reasons that individuals might feel distressed about the uncertain contents of their partner's mind. First, if the perceiver is the one initiating the inquiry or request for consent, there is a possibility that the target may *not* grant consent, or may communicate non-consent, which may be perceived as distressing. This also presents a threat to the immediate gratification of the potential sexual encounter. Furthermore, and perhaps more importantly, it may be perceived as a relational threat – a signal that the relationship is not as stable as believed or that it will not progress as expected. Indeed, reducing relational uncertainty is risky, as it can sometimes unveil unequivocal information that damages the trajectory of the relationship (Knobloch & Solomon, 2002). Therefore, sometimes individuals prefer to remain uncertain as opposed to learning information that is threatening or negative (Afifi & Burgoon, 1998). In these cases, individuals are not always motivated to seek information in order to reduce uncertainty (and promote accuracy). The potential threat of rejection serves as an additional potential threat in that situation.

The model also purports that perceptions about the *consequences* of accurate inferences should serve as an obstacle against achieving empathic accuracy. Theoretically, this aligns quite well with the roles of both outcome expectancies and coping efficacy outlined in TMIM. Following a similar logic, the possibility of having to engage in relational repair following a refusal to engage in sexual activity is also a face-threatening activity (Goffman, 1955). In sum, expectations about the information that *could* potentially be revealed – either by an information search or via accurate inferences about one's partner –

are theoretically predicted to affect one's motivation to engage in actions necessary to obtain the information. Expectations about the process of seeking the information should have a similar effect. Those who see the process of seeking information about consent as positive for the relationship do not face a "threat" that would shift their attention away from cues that would enable them to be accurate. Similar to how negative outcome expectancies can dampen one's efficacy to carry out the information search (and result in an abandoned information search), motivation to achieve empathic accuracy should be dampened by negative outcome expectancies. Those who are less motivated to achieve empathic accuracy generally do not perform as well at the task compared to those who are highly motivated. These ideas are encapsulated in the following prediction:

H6: The process of motivated inaccuracy, by way of negative outcome expectancies and negative coping efficacy, leads to increased chances of unwanted sexual activity (i.e., quadrant III in Figure 1).

Additionally, the Empathic Accuracy Model suggests that accuracy will be affected by the *clarity or ambiguity of the cues* that signal a partner's thoughts and feelings. The readability, or expressivity, of the target affects the perceiver's ability to be accurate. For example, a raised eyebrow would be considered somewhat ambiguous; it leaves room for interpretation. Thomas and Fletcher (2003) label this "behavioral diagnosticity," which is operationalized as the extent to which individuals' outward cues reflect internal mental states. As would be expected, higher behavioral diagnosticity is associated with higher readability. In TMIM, the partner's influence as the "information provider" is purported to be an imperative part of the information seeking process (see Afifi & Morse, 2009). From an evolutionary perspective, being a readable target is adaptive, as signaling your internal states

to others helps facilitate social coordination. As a result, most of the time, individuals are motivated to be readable. However, research has identified that those who are sensitive to social threats are less expressive and more withdrawn when social threats are heightened (Gaucher et al., 2012). In the context of conversations about sex, it is reasonable to expect that some individuals will attempt to be less readable because of the potential for social threat (e.g., rejection, embarrassment). Based on previous research on conversations of this nature as noted above, people often err on the side of being verbally indirect as well as utilizing nonverbal communication.

However, given that sexual consent is an interpersonal and dynamic negotiation, an obvious influence on how clear or direct a partner's cues are regarding consent is the directness with which the perceiver *seeks* information. As noted above, individuals can seek information (directly or indirectly), avoid the information search (actively or passively), or reappraise the situation (as less important, for example). Direct information seeking, in the form of directly asking one's partner if he/she consents, and what sexual acts he/she does or does not consent to, should promote greater accuracy by eliciting verbal cues from one's partner. In contrast, those who avoid the information search are likely to face a more difficult task with respect to inferring a partner's perspective. Another possibility that likely reflects reality for many communicators in this context is some form of indirect information seeking. This notion is advanced and TMIM is extended in the form of the following hypothesis:

H7: Directness of information seeking is positively associated with empathic accuracy.

Should some or all of the conditions outlined above be met, the Empathic Accuracy Model would predict a shift toward motivated *in*accuracy in an attempt to maintain uncertainty or even increase it as a line of defense against potential threat. In sum, when a perceiver anticipates that a partner's thoughts or feelings are harmful or destabilizing to the relationship, the perceiver will try to avoid the situation altogether or perceptually shift from an "inferential accuracy set" to a "motivated inaccuracy set" (Ickes & Simpson, 1997, 2001).

In support of the Empathic Accuracy Model, scholars have found relational closeness to be negatively affected by empathic accuracy when one's partner is harboring relationship-threatening thoughts and feelings (Simpson et al., 2003). In Simpson, Ickes, and Blackstone's (1995) study of dating couples, those who felt insecure about the relationship were more likely to stay together several months later to the extent that they exhibited *lower* levels of judgment accuracy in the lab. In conflict interactions, partners who were closer and happier displayed less empathic accuracy than those who were less happy (Sillars & Scott, 1983), and greater understanding is associated with relationship disharmony when it reflects increased awareness of a partner's conflict-provoking beliefs and perceptions (Sillars, 2011). In other words, individuals often dial down their ability to be empathically accurate as a way of protecting themselves from what they perceive to be threatening information to "know" with certainty. In some contexts, this may be beneficial for a relationship.

However, in the context of inferring a partner's thoughts and feelings about sexual interest and consent to engage in sexual activity, anything that impairs one's ability to be as accurate as possible about a partner's perspective should be detrimental. This is because one's meta-perception in this context (i.e., what you think I think), whether accurate or not, guides behavior. In other words, erroneously believing that another person: a) is sexually

interested, and b) consents to sex, even naively, can be a precursor to unwanted sexual encounters. As discussed above with respect to sexual scripts and EMT, there are a number of potential factors that may lead to individuals proceeding with a sexual act while wrongly assuming consent has been granted. If certain conditions are met, as outlined in Figure 1 (p. 142), individuals should be more likely to accurately understand the desires of their partner, and thus, not proceed with sexual acts they are not comfortable with. This hypothesis assumes that obtaining consent is an important predictor of behavior (again, excluding serial rapists):

H8: Empathic accuracy is negatively associated with non-consensual sex.

Uncertainty Management in Sexual Consent Negotiations

The Theory of Motivated Information Management (TMIM; Afifi & Weiner, 2004) helps situate both the cognitive and the communicative barriers faced by individuals when they engage in interactions about sexual consent. In the current study, information seeking as an uncertainty management strategy is purported to affect one's ability to achieve empathic accuracy. Specifically, information seeking as well as outcome expectancies should affect one's ability to accurately infer a partner's consent to engage in sexual activity, which should then affect behavioral decisions with significant consequences. Importantly, both perspectives do acknowledge both the role of motivation and the role of threat in whether or not individuals come to "know" something with certainty/accuracy. Taken together, the theoretical positions of the Empathic Accuracy Model and TMIM lay the foundation for an empirical test of how consent conversations unfold (or fail to occur), as well as what variables put partners at greater risk for engaging in nonconsensual sex. The study aims to

understand and explain situations in which non-consensual sexual activity occurs, as well as identify barriers to information seeking.

CHAPTER FOUR

METHOD

Participants

Ninety-six college-aged dyads ($N = 192$) participated in a survey that took approximately 45 minutes to complete. In this study, "couple" was operationalized loosely to include a myriad of relationship types that could include sexual activity. To focus on those for whom discussions about sexual consent are most salient and most challenging, and for whom relationally-specific sexual scripts are in their early stages of development, the dyad had to have been sexually active together for *less* than three months in order to participate in the study. Moreover, participants needed to be able to identify two recent sexual experiences with the same person that "involve penetration or anything below the belt" and be comfortable reporting on those experiences. Other eligibility criteria included that participants were at least 18 years old and had to be able to speak English. There were no specific requirements in terms of sexual orientation, relationship type, ethnicity, age, income, or level of education.

Participants were undergraduate students in communication courses and their partners, who were not required to be students. Students participated in exchange for course research credit; their partners were not compensated. In this study, recruiting college students as participants is a strength rather than a weakness, given that sexual assault disproportionately affects college students compared to the general population (Daigle, Fisher, & Cullen, 2008) and that sexual scripts may be less developed than is the case for post-college samples. Less developed sexual scripts allow us to more fully examine the nature of consent negotiation.

The average age of participants was *M* = 19.95 (SD = 1.95, range = 18-33). Almost half of participants identified their race or ethnicity to be Caucasian (46%), while other participants identified as Asian (22.2%), Latino/a or Hispanic (15.3%), African American (5.1%), Native American (1.7%), or other (9.7%). In terms of sexual identity, the majority of the sample identified as heterosexual (87.5%) while some identified as gay (5.1%), lesbian (2.8%), bisexual (3.4%) and other (1.1%). Almost all participants reported that their marital status was single (98.3%) while a small percentage (1.7%) reported being married. Participants in this sample were relatively satisfied with the relationship (*M* = 4.44, SD = .90, scale range = 1-5). They also reported being relatively happy overall in the last month; mood scores were relatively high (*M* = 4.81, SD = .83, range = 2.25-6 on a 7-point scale).

Most participants reported that the person they focused on in the study was their only current sexual partner (83%), while 17% reported having other current sexual partners. When asked how long they had been sexually active with this partner, most reported "1-3 months" (79.4%), followed by "1-3 weeks" (12.6%) and some who reported that the sexual encounters about which they were reporting were the first sexual activity with this partner (8%). Participants reported engaging in penile/vaginal intercourse an average of about three times per week (*M* = 2.77, SD = 2.51, range = 0 - 11). In terms of the specific episode they reported on in the study (where participants could select as many types of sexual activity that applied, 78.8% reported the sexual episode included penile-vaginal intercourse, almost half reported that it involved hand stimulation (giver: 43.5%, receiver: 42%), followed by oral sex (giver: 38.9%, receiver: 35.2%) and anal sex (3.6%). When rating their satisfaction with their sexual communication in general with their partner, participants' scores averaged above the midpoint of the scale (*M* = 4.80, SD = .96, range = 2.5 - 6.00).

A large number of participants' data were removed from analyses due to strict rules for inclusion of the data. In order to be included, there needed to be clear evidence that tied partners together as a dyad. Operationally, that involved ensuring that the data included matching dyad IDs. Additionally, at least one of the sexual episodes had to match, which was determined by comparing the dates and times of the episodes reported on by each partner. This ultimately ensured that those in the dyad were reporting on the same event. These criteria resulted in the elimination of 231 participants. Specifically, one-hundred and eighteen (*N*=118) participants' data were unusable because they could not be matched with another participant's ID (either their partner failed to take a survey or their partner failed to enter the correct ID number and the researcher had no way to match them) and another 113 participants' data *did* match with another participant's ID (i.e., a dyad existed), but could not be included in the study because they did not report on the same sexual episode (i.e., there was no overlap between the dates the partners reported on). This likely occurred so frequently because participants were instructed to report on the two most recent sexual episodes with that partner, yet the second partner could only receive the link to complete the survey from the first partner. Thus, some may not have received the link, and some may have not started the survey until a later date than the first partner (and thus, reported on different sexual episodes). After eliminating unusable data, 96 dyads remained in the analysis who had at least one overlapping sexual episode. The most recent sexual episode was selected when sexual partners matched on both reported episodes (dates and times aligned for both).

Procedures

In order to protect confidentiality, participants never communicated directly with the researcher. Instead, all sign-ups and crediting were done through the communication department's online subject pool and Qualtrics. Participants signed up through the online subject pool and accessed the survey link upon signing up. In the survey, participants created their own participant code to protect their identifying personal information. Within the survey itself, they were provided with the link to the survey to email to their partner and were asked to also send the code they created; the code allowed their surveys to be linked for dyadic analysis. They were instructed that their partners needed to complete the survey within 24 hours. Qualtrics was set up to interface with the communication subject pool software such that upon submission of the survey, participants were automatically granted course credit. In other words, the researcher did not see a list of participants and manually grant them credit in the system, as is typically done with online surveys in the subject pool software, safeguarding the participants' confidentiality.

The survey (see p. 146) asked participants and their partners to identify two most recent (i.e., within the past 72 hours, for accuracy of recall) sexual episodes, then report, independently, on several aspects of each episode. Specifically, they were asked to (a) provide a detailed narrative of the episode, including any verbal or nonverbal messages of consent or resistance that occurred related to sexual activity, (b) complete a recall task designed to measure empathic accuracy, then (c) complete several self-report measures related to consent, their general attitudes, and relationship characteristics. The study took approximately 45 minutes to complete. They were asked not to speak to their partner about the contents of the survey until they had both completed the survey.

Measures

Identification of sexual episode. Because the study focuses on communication and cognition that occurs prior to sexual activity, it was necessary to have both partners reporting on the same sexual episode. Sexual episodes were defined as acts involving penetration or anything "below the belt" (such as oral sex or hand stimulation). To attempt to target the same sexual episode, participants and their partners were asked to report on the two most recent sexual episodes involving one another. Several questions at the beginning of the survey operated to identify those episodes and allow the researcher to "match" the sexual episodes within a particular dyad. They were asked to report the day of the week, date and time the sexual activity began for each episode, as well as where it occurred. Additionally, they were asked to identify what kind of sexual activity occurred in the episode (*penile-vaginal intercourse, anal sex – giver/receiver, oral sex – giver/receiver, hand stimulation,* or *other*), how well they could recall the details of the sexual episode (*1= not very well; 7= extremely vividly*; $M = 5.07$, $SD = 1.71$, range: 1 - 7) as well as the extent to which everything that happened in that sexual episode was something they wanted to happen (*1= strongly disagree; 7= strongly agree*; $M = 6.30$, $SD = 1.19$, range: 1 - 7).

Narrative reconstruction of episode. Next, participants were asked to spend 10-15 minutes writing about the episode. The purpose of this exercise was to aid in the interpersonal perception task that followed, which asked them to respond to a list of verbal and nonverbal behaviors. Having them spontaneously generate details about what happened was designed to mitigate the tendency of biased recall when reading from a list of possible behaviors.

Participants received the following instructions: *With episode [1, 2] in mind, we would like you to please write, in as much detail as possible, about the events that led up to this episode. In other words, please "tell the story" of what happened between you two, describing any discussion you had with your partner (with words or body language), any touching/kissing that took place, or anything else that you think is important.) We would like you to be comfortable to be as open as possible. The purpose of this exercise is to prompt your thinking about the verbal and nonverbal communication that occurred prior to and during the sexual episode. Remember, your name will never be linked to these data, and your partner will not read what you write. Please take 10-15 minutes for this exercise.* The primary reason the narrative reconstruction data were collected was to prompt participants' thinking about the sequence of events that occurred during the sexual episodes *before* being presented with a list of possible verbal and nonverbal cues. This exercise was designed only to aid in recall and was not utilized for analysis in the current study.

Empathic accuracy task. Next, participants completed an empathic accuracy task developed by the researcher that is a variation on the Ickes et al. (1990) unstructured dyadic interaction paradigm. In the Ickes model, dyads typically engage in an interaction in the lab, after which they are separated to engage in the video-assisted recall of their own thoughts and feelings and inferences about their partner's thoughts and feelings during that interaction. However, given that pre-sexual activity interaction cannot be re-constructed in the lab without significantly compromising realism, nor can the same goals be simulated (e.g., impending sexual activity, relational intimacy), recall of a recent interaction took the place of a lab interaction. The measure involved two parts, each completed twice – once for each of the two episodes on which they reported.

Part I of the task was designed to identify which behaviors occurred in the sexual episode in order to subsequently describe the associated online thoughts and feelings (in Part II). In the Ickes paradigm, participants are video-taped during an interaction, providing "chunked" behaviors to watch back and aid recall of on-line thoughts and feelings. In this study, aided by the narrative reconstruction task, participants read from a list of potential verbal and nonverbal cues that may or may not have occurred during their own sexual episode, adapted from Hickman and Muehlenhard's (1999) work on sexual scripts. They were asked to indicate whether each cue (labeled "possible events in the sexual episode") *did not occur*, *is very close to what occurred*, or *occurred exactly*. The cues included direct verbal signals (e.g., *He says, 'I want to have sex with you.'*), direct nonverbal signals (e.g., *You don't say anything – you just start having sex with him/her.*), indirect verbal signals (e.g., *She suggests you get a condom out.*), indirect nonverbal signals (e.g., *You get physically closer to him.*), intoxication signals (e.g., *He says, 'I'm feeling a little drunk.'*), direct refusal signal (e.g., *You say, 'No.'*), and no response signals (e.g., "*You do not resist his/her sexual advances.*). See Appendix A for the survey instrument.

Participants received the following instructions prior to the empathic accuracy task: "The following includes a list of a number of things that may or may not have occurred in the sexual episode that you just wrote about. Keeping in mind the details you just recorded, as well as any other details you remember from that episode, please read each item and indicate *1 (this did not occur)*, *2 (this is very close to what occurred)*, or *3 (this occurred exactly)*. Please keep in mind that if something close to this occurred, but not in the exact language, we would like you to select *"2"* – that it was close to what occurred. Please check the items

if they ever occurred in this episode (regardless if they are in a different order from how events unfolded)."

Part II of this task asked participants to report how they were thinking and feeling and how they believe their partners were thinking or *during* each of the events that they identified as having occurred (in Part I) in the form of open- ended responses. The survey was designed such that any item that was selected in Part I as having occurred or having been close to what occurred was piped in to this section. Participants received the following instructions: "Part I of this exercise asked you to identify the events that occurred. Now, we'd like you report how you were thinking and feeling **during** each of those events. What we'd like you to do is revisit the items for which you selected 2 or 3 (that happened or were very similar to what happened), and please answer the next questions. You will see that these items have been dynamically pulled into this next section. If this happened more than once in this episode, please focus on the first time this happened. We're interested in the specific content of your thoughts and feelings (i.e., your thought process) just during the time that each specific event occurred. In other words, try to focus on that particular moment, and indicate what you remember thinking and feeling. Then, reflect on what you thought your partner was thinking and feeling in that moment. Please take your time with this task. Again, the person you brought to the lab will not be able to view your responses. If a particular act happened more than one time in the sexual episode, please focus on the first time it happened."

The thoughts and feelings they generated represented their own direct perspectives ("actual" thoughts and feelings) and meta perspectives/inferences of their partner (their projected or "perceived" thoughts and feelings of the partner). Assuming partners report on

at least some of the same discrete events, empathic accuracy scores can be calculated after coding for how closely the meta-perspective of one partner aligns with the direct-perspective of the other.

Empathic accuracy scores. Following the coding procedure created by Ickes, Stinson, Bissonnette, and Garcia (1990), independent trained raters were prepared to code the inferences against the direct perspectives. The goal of each coder was to compare the content of the actual thoughts and feelings of the individual (the target) to the inference made by the relational partner (the perceiver). Each thought/inference unit is rated for using a 3-point scale on which 0 = *different content from the actual thought and feeling*; 1 = *similar, but not the same, content as the actual thought and feeling*; and 2 = *essentially the same content.* The overall score is then divided by two (to obtain a *0-1* rating scale) and then is divided by the total number of inferences made. This results in a percentage index of empathic accuracy, which can vary from 0% (completely inaccurate) to 100% (perfect accuracy).

TMIM measures. The TMIM variables were adapted from Afifi and Weiner (2006). In the first part, participants were asked to think about how they felt *before* the sexual episode they reported on and respond accordingly. Several items assessed each variable in the TMIM model measured using a 7-point Likert-type scale, with most items (specified below if different) from 1 (*strongly disagree*) to 7 (*strongly agree*). Some items were reverse-coded before the scales were created so that each item measured in the same direction.

Uncertainty discrepancy was measured by a single-item: "Before that episode, I knew less than I wanted to know about whether my partner would consent to sex." Two items assessed *anxiety about the uncertainty discrepancy* (e.g., "How anxious did it make you to

think about how much you wanted to know about your partner's consent and how much you actually understood about this issue?") with moderate reliability (Cronbach's α = .78). Two items assessed *outcome expectancies*, (e.g., "I thought that talking to my partner about consent would reveal what I wanted to hear"). However, internal consistency was weak (Cronbach's α = .54), so one item, "My expectations about how a conversation about consent with my partner would go were" (1: *very positive* – 7: *very negative*), was utilized for analyses rather than creating the scale.

Three types of *efficacy* were assessed: *coping efficacy*, *communication efficacy*, and *target efficacy*. Target efficacy was measured by two subscales, capturing perceptions of the target's *honesty* and *ability* to discuss consent. After one item was deleted to improve reliability, two items measured target ability (e.g., "I thought this person was capable of giving me information about his/her consent") with high reliability (Cronbach's α = .85). Similarly, after one item was deleted, two items measured *target efficacy - honesty* (e.g., "I felt that this person would be completely honest about his/her interest or lack thereof") with high reliability (Cronbach's α = .88). Since the four items coalesced as a single measure (Cronbach's α = .92), a combined target efficacy scale was ultimately used.

Communication efficacy was measured by three subscales: efficacy regarding *direct* communication, *indirect* communication, and *passive* communication. Direct communication efficacy was measured by two items (e.g., "I felt that I had the ability to approach my partner to talk about this issue") had high reliability (Cronbach's α = .91). Indirect communication efficacy was measured by four items (e.g., "I felt like I had the ability to understand his/her consent by indirectly asking for it") and had high reliability (Cronbach's α = .92). Using the items from the three subscales, the combined

communication efficacy scale had high reliability (Cronbach's α = .90). Two items assessed *coping efficacy* (e.g., "I felt like I could handle whatever I might find out about my partner's consent") but with low reliability of the scale (Cronbach's α = .37) the researcher made the decision to delete one item ("I didn't think I'd be able to handle what I might find out related to my partner's consent") and utilize one item for analyses ("Before this episode, I felt like I could handle whatever I might find out about my partner's consent").

In the second part, participants were instructed to reflect on the communication that took place *in* the episode. *Information seeking* was assessed in terms of *direct* information seeking, *indirect* information seeking, and *avoidance* behaviors. A single item assessed the directness of information seeking ("Please rate how directly vs. indirectly you asked your partner about sexual consent"; 1: *very indirectly* – 7: *very directly*). Additionally, one question asked, "Did you seek consent?" (*yes/no*). Avoidance was measured by two items, but the reliability was unacceptable, Cronbach's α = .65. Analysis of the descriptives revealed that one item appeared to have a large number of missing data that appeared systematic; therefore, that item ("I went out of my way to avoid discussing consent with my partner") was deleted and the other ("During the episode, I avoided talking about consent to my partner") was used as a single-item indicator. Indirect information seeking was measured by one item, "During the episode, I observed my partner's nonverbal behavior to see if he/she consented to sex." Four items assessed perceptions of the actual outcome of the interaction (e.g., "Discussing consent with my partner had…" [1: *a very negative effect on our relationship* – 7: *a very positive effect on our relationship*]). One item was deleted to improve internal consistency, resulting in high reliability, Cronbach's α = .94. Finally, to

assess their role as the information provider, they were asked to report on the extent to which they communicated their consent to their partner.

Empathic accuracy confidence. A scale to assess individuals' confidence in their ability to understand their partner's consent cues and accurately "read" their partner was created by the researcher. Four items asked the participant to indicate his/her confidence in terms of a percentage, ranging from no confidence at all (0%) to complete certainty (100%). Items included: "In general, I can discern what specific sexual acts my partner consents to engage in"; "In the episode I reported on, I knew what specific acts my partner consented to engage in with me"; "I have the ability to accurately 'read' my partner"; "I know what my partner is thinking and feeling". Reliability of the scale was moderate, Cronbach's $\alpha = .71$.

Consent and unwanted sexual activity. Several items in the survey assessed participants' perceptions about the consensual nature of the specific sexual episode (see Table 1, p. 140 for descriptive statistics on items related to consent). These included two items that asked the participants to indicate, in the form of a percentage, "What percentage of all the sexual activities in this sexual episode were ones in which you were enthusiastic about participating?" and "What percentage of all the sexual activities in this sexual episode were ones in which you did not want to take part but took part in anyway?" These items served as proxies for identifying unwanted sexual activity (non-consensual sex). Four items asked participants to rate on a scale from 1: *strongly disagree* to 7 : *strongly agree* several statements regarding consent: "All sexual activities in this sexual episode were ones I was enthusiastic about participating"; "There were sexual activities during this episode in which I participated in despite my preference that I not do so" [reverse-coded]; "I provided either direct or indirect consent to all sexual activities in which I engaged in this episode"; and "I

was an active participant in all sexual activities in this sexual episode." Reliability of the scale was moderate (Cronbach's α = .81). In addition, one single item scale (1 : *all the time*, 4 : *sometimes*, 7 : *never*) assessed perceptions of sexual activity in general in the relationship: "In general in your relationship with this person, to what extent do you only engage in sexual activity that is mutually agreed upon by an affirmative, unambiguous decision?" One item asked plainly if they sought consent: "Did you seek consent to engage in the sex act you described in the episode?" (*yes/no*). 80.4% (*N* = 148) of participants answered "yes," and 19.6% (*N* = 36) answered "no" regarding seeking consent. One item asked if they provided consent: "Did you communicate your consent to engage in the sex act you described in the episode?" 87.3% (*N* = 158) of participants reported communicating their consent, whereas 12.7% (*N* = 23) said they did not communicate their consent.

Affirmative consent difference. Affirmative consent difference was created by taking the absolute values of a difference score of men's and women's perceptions of affirmative consent (i.e., "...to what extent do you feel that you both made an affirmative, unambiguous decision to engage in mutually agreed upon sexual activity?"). The further that score is from zero, the greater the partners' disagreement on whether the episode represented an "unambiguous decision" to take part in "mutually agreed upon sexually activity."

To further explore affirmative consent difference as a variable that could indicate misunderstanding, this variable was also created separately for men and women. Men's scores were subtracted from women's scores to calculate female affirmative consent difference, and women's scores were subtracted from men's scores to calculate male affirmative consent difference. This allowed for examination of the *direction* of the difference – from both the male and female perspectives.

Several descriptive characteristics are worth noting. First, 65% ($N = 51$) of dyads had an affirmative consent difference score of zero; that is, there was no discrepancy between their ratings on this item. When pooling all the individuals who had affirmative consent difference scores that were in the *negative* direction (i.e., difference scores between -6 and -1), 17% of women had negative scores and 17% of men also had negative scores. To put this differently, individuals in these groups of men and women reported that the episode was characterized by *less* mutually consensual sexual activity than their partners reported. Thus, those negative-difference-score individuals may have engaged in sexual activity that their partners presumed was mutually agreed upon but they did not perceive it in the same way.

Attitudes related to rape culture. To measure rape myth acceptance, participants rated 11 items assessing four underlying attitudes that contribute to rape myth acceptance, on a six-point scale: *She asked for it* (e.g., "When girls get raped, it's often because the way they said 'no' was unclear"); *He didn't mean to* (e.g., "It shouldn't be considered rape if a guy is drunk and didn't realize what he was doing"); *It wasn't really rape* (e.g., "If a girl doesn't physically resist sex—even if protesting verbally—it can't be considered rape"); and *She lied* (e.g., "Rape accusations are often used as a way of getting back at guys"). Reliability of this scale was high, Cronbach's $\alpha = .87$. Examination of the descriptive statistics for rape myth acceptance revealed that although means were below the midpoint of the 6-point scale, scores ranged from 1 to 5.45. A paired-samples *t*-test was conducted to compare mean scores on rape myth acceptance between men and women. The test revealed that men's scores ($M = 2.38$, $SD = .94$) were significantly higher than women's ($M = 2.00$, $SD = .84$); $t(77) = -3.27$, $p < .01$ (two-tailed).

Additional efficacy measures. Three additional efficacy measures were included from Cecil and Pinkerton's (1998) work on a self-efficacy instrument for protective sexual behaviors. Refusal self-efficacy, or *how sure that you would be able to say no to having sexual intercourse* (scale of *1 - 5*) was measured by five items (e.g., "On a normal day?"; "After you have been drinking alcohol?") with high reliability, Cronbach's $\alpha = .90$. The same items were asked in terms of perceptions of one's partner being able to say no, measuring perceptions of partner refusal efficacy (Cronbach's $\alpha = .92$). In addition, six items assessed discussion self-efficacy (*how sure you are that you would be able to discuss the following with your current sexual partner*) as it related to several topics: "Discuss preventing pregnancy?", "Ask…if he/she has ever had a sexually transmitted disease?", and so on. Reliability of the scale was high, Cronbach's $\alpha = .92$.

Relationship characteristics. Closeness and global relational satisfaction was measured utilizing five items from Denes (2015) including "How emotionally connected do you feel to your partner?" on a scale from 1 - 5 (1 : *not at all,* 3 : *somewhat,* 5 : *a great deal*). Reliability of the scale was high, Cronbach's $\alpha = .93$. Sexual satisfaction (Lawrance, Byers, & Cohen, 1998) was measured by one question ("How would you describe your sexual relationship with your partner?") and five items with semantic differentials on a scale of 1 - 5 (e.g., 1 : *very good* to 6 : *very bad*; 1: *very valuable* to 6: *very worthless*) with high reliability, Cronbach's $\alpha = .93$. A shortened version of Catania's (1998) dyadic sexual communication scale measured how participants perceived the discussion of sexual topics with their partners (e.g., "I have little difficulty in telling my partner what I do or don't do sexually"). The 6-item short-form scale with items on a scale of 1 - 6 (1: *strongly disagree* to 6 : *strongly agree*) had high reliability, Cronbach's $\alpha = .81$). Participants were also asked how many

times a week on average they engaged in penile/vaginal intercourse as well as other sexual activity with their partners, how long they had been sexually active with this partner, and how many other sexual partners they have besides the one in this study.

Additional measures. Demographic information was collected from participants including age, sex, sexual identity, ethnicity, length of relationship, relationship type (*friends with benefits*, *dating partners*, *spouse*, or *other*), and marital status. These measures provided descriptive information about the individuals and the relationship characteristics between the partners. Mood over the past month was measured using five items adapted from the Positive and Negative Affect Schedule (Watson, Clarke, & Tellegen, 1988) which asked participants to indicate, for example, "How much time, during the past month…" *...were you a happy person?* On a scale from 1 – 6 (1 : *none of the time*, 2 : *a little bit of the time*, 3 : *some of the time*, 4 : *a good bit of the time*, 5 : *most of the time*, 6 : *all of the time*). The mood scale had good reliability, Cronbach's $\alpha = .85$.

In addition to the above-described measured, participants completed a battery of other instruments to be examined as part of other interests. These measures included sexual health and satisfaction, post sexual activity, and power.

Sexual health and satisfaction. Comfort discussing sexual health was measured by seven items from Snell (2010) on a five-point scale from 1: *I have not discussed this with my current sexual partner* to 5: *I have fully discussed this topic with my current sexual partner*. Items included "My past sexual experiences", "concerns that I have about sexually transmitted infections and diseases", and "how I feel about pregnancy at this time." Reliability of the scale was moderate, Cronbach's $\alpha = .79$.

Post sexual activity measures. Four items from Muise, Giang, and Impett (2014) assessed affectionate behaviors following sexual activity, where participants were asked to indicate how long they engaged in certain behaviors (e.g., cuddling; intimate talk) after sexual activity, in minutes, as well as one item that asked how satisfied they were with these post sexual activity behaviors. Nine items (1: *strongly disagree* to 7: *strongly agree*) measured communication following sexual activity, in terms of valence and risk-benefit assessment (Denes & Afifi, 2014). Example items include, "I expressed some positive feelings for my partner to him/her" and "I saw some risks in telling my partner my feelings for him/her" (reverse-coded). With one item deleted, reliability of the scale was high (Cronbach's $\alpha = .87$).

Power. Participants indicated whom they perceived held more power in the relationship through four items from Dunbar and Abra (2010) measure of dyadic power. Sample items included "Who has more power overall?" and "Who can more easily persuade the other?" with ratings ranging from 1 (*my partner) to 7 (me)*, with the scale midpoint representing "*both of us equally*." After one item was deleted to improve reliability of the scale, internal consistency was moderate (Cronbach's $\alpha = .73$). Correlations among the predictor and outcome variables used in the analysis are presented in Table 2 (p. 141).

CHAPTER FIVE

RESULTS

Data Analysis Plan

Dyadic data. Dyadic data present a number of unique challenges for researchers. As such, when studying dyads, one of the most fundamental aspects of data analysis is *nonindependence*, or the idea that members of a dyad share commonalities and are not simply two independent individuals (Kenny, Kashy, & Cook, 2006). More formally, nonindependence exists when the two scores from two members of a dyad are more similar (or dissimilar) to one another than two scores from two people outside the dyad. In social interaction, individuals are both *actors* who produce behavior, and *partners* who act as stimuli for others' behavior (Malloy & Albright, 2001). In other words, each individual exerts some degree of influence on their partner, which often results in the scores on a given variable being more similar within a particular dyad than across dyads.

There are a number of sources of nonindependence that should be a relevant concern for researchers, including the compositional effect, the partner effect, mutual influence, and common fate (Kenny, 1996). The *compositional effect* refers to the notion that dyad members are often similar on various traits before they were paired. Even if individuals are not similar in traits before entering the partnership, the *partner effect* is concerned with the fact that one's social partner serves as a stimuli for that person's behavior. For example, the expressivity of one partner should affect the empathic accuracy of the other partner. *Mutual influence* refers to the reciprocity that occurs within the dyad through the process of feedback, such as the way liking or commitment between relational partners might be communicated and reciprocated. Finally, the idea of *common fate* suggests that dyad

members exposed to the same environmental factors, such as living in the same house, will influence some outcome. An alternative to combining the scores of dyad measures as a way to manage nonindependent observations was born when researchers began to retain the individual unit measures but treat them as being nested within the dyad (Cook & Kenny, 2005).

The problems associated with violations of nonindependence include inaccurate degrees of freedom and test statistic (*t* or *F*) as well as the statistical significance (the *p*-value) being biased (Kenny et al., 2006). Several steps are necessary to assess nonindependence. First, it is important to determine whether dyad members can be distinguished by some meaningful variable or not, or what is referred to as *distinguishability* (Kenny et al., 2006). Appropriate data-analytic tools depend on whether dyads are distinguishable or not. For example, heterosexual dating or married can be distinguished by gender, siblings can be distinguished by birth order, and parents can be distinguished from children. In the present study, participants can be distinguished by gender.

Once distinguishability has been established, nonindependence is assessed statistically. The intraclass correlation (ICC) is used to measure nonindependence for indistinguishable dyad members, and the Pearson product-moment correlation is used to measure nonindependence for dyads with distinguishable members (Cook & Kenny, 2005). However, it is difficult to detect nonindependence with either the product-moment correlation or the ICC, so with an alpha level of .20 and less than 35 dyads researchers should assume nonindependence even if the statistical test does not confirm this (Kenny, Kashy, & Bolger, 1998). One can model the ICC as a linear mixed model, as a multilevel model, or as a SEM.

APIM. The actor-partner independence model (APIM) is a data-analysis strategy that is especially well suited for non-independent data. It preserves the individual unit measures but allows them to be nested within the dyad; this enables estimating both individual and dyadic factors (Cook & Kenny, 2005). In the APIM, the dyad is treated as the unit of analysis and participants' scores on independent variables are used to predict their own (actor effects) and their partners' (partner effects) scores on the dependent variable, after accounting for the dyad's interdependence on the independent variable. The actor effects are at the individual level of analysis and the partner effects are at the dyadic level. As such, the partner effects estimate a form of interdependence. Actor and partner effects are estimated controlling for the other. The analysis of APIM can be done with three statistical techniques: regression, structural equation modeling (SEM), and multilevel modeling (MLM). The present study utilizes the APIM paradigm within SEM.

Structural equation modeling. SEM is a collection of statistical techniques that allows for estimating models of linear relationships among variables (MacCallum & Austin, 2000). These relationships can be between one or more independent variables (continuous or discrete) and one or more dependent variables (continuous or discrete). More specifically, SEM examines construct measurement and structural paths (regressions) between latent variables in order to test a series of causal paths simultaneously (Kline, 2011). SEM enables the researcher to test relationships between variables as well as assess overall model fit using indices of fit. In contrast to exploratory factor analysis, SEM is a confirmatory technique; therefore, it is important that the relationships among the variables are strongly theoretically grounded (Tabachnick & Fidell, 2007). SEM combines factor analysis, canonical correlation, and multiple regression. Because it combines these approaches, SEM allows for

testing direct relationships among variables while accounting for measurement error simultaneously.

SEM allows for the modeling of both measured (or observed) variables and latent variables (those that cannot be directly measured). *Latent variables* or *factors* represent constructs that are meant to represent a continuum on that is not directly observable (Kline, 2011). Examples of latent variables include intelligence, satisfaction, and attachment – constructs in which there is no single, indisputable measure. Typically, a construct is represented by multiple measured variables, also known as *manifest variables* or *indicators*, of the construct. These variables are directly measured such as age or relationship length. Latent variables are specified by regressing these variables onto multiple indicators. Whereas standard statistical techniques, such as analysis of variance (ANOVA) and multiple regression (MR), can only analyze observed variables, the advantage of SEM is that it enables the researcher to analyze both observed and latent variables (Kline, 2011).

The model itself represents hypothesized patterns of directional and nondirectional linear relationships among a set of factors (latent variables) and indicators (manifest variables). Predictor and outcome variables are also differentiated in SEM models. Variables that predict other variables in the model but are not predicted by any other variables are called *exogenous variables*, whereas those predicted by other variables (regardless of whether they predict other variables) in the model are called *endogenous variables* (Schreiber et al., 2006). The nondirectional relationships are correlational, whereas the directional relationships indicate directional influence of one variable on another.

Constructing the full SEM model requires specifying two parts of the model: a measurement model and a structural model. The relationships between the indicators and the

factors form the *measurement model*. This is the part of SEM that draws on confirmatory factor analysis in order to ensure that the constructs have been properly measured before the structural paths can be tested (Kline, 2011). After the measurement model has been specified, the hypothesized paths between the latent variables are tested in a *structural model* (Kline, 2011). The process of utilizing SEM involves several stages: (a) initial model conceptualization, (b) parameter identification and estimation, (c) data-model fit assessment, and (d) model modifications if needed (Mueller & Hancock, 2008).

Overview of data analysis. Thus, SEM utilizing the APIM paradigm (see Figure 3, p. 144) was utilized to analyze hypotheses one, two, three, and five, which predicted relationships among TMIM variables in the context of sexual consent communication: uncertainty discrepancy regarding a partner's sexual consent is positively associated with anxiety (*H1*); anxiety is negatively associated with outcome expectancies (*H2a*) and perceptions of efficacy (*H2b*); outcome expectancies are positively associated with efficacy (*H3*), and perceptions of efficacy are related to more direct information seeking (*H5*). The data utilized for these hypotheses were separated by gender to produce two identical SEM models with paths that model the interdependence (actor-partner effects) within a dyad. The reason these analyses were conducted using SEM is that it allowed for multiple paths to be tested simultaneously, as well as for the examination of both the direct and indirect effects of uncertainty discrepancy and anxiety on information seeking. Additionally, it enabled dyadic analysis, which models interdependence. Subsequent hypotheses were tested using regression, as they examined specific relationships between variables but did not require multiple paths to be tested simultaneously.

Hypothesis four predicted that those with moderate levels of uncertainty discrepancy (largest gap between what they know and what they want to know about their partner's consent) would be the *most* likely to seek information from their partners, followed by those with low and high levels of uncertainty discrepancy. In other words, whereas the TMIM predicts a linear negative relationship between uncertainty discrepancy and information seeking (albeit mediated through perceptions of outcome expectancies and efficacy), the current study predicted that a quadratic relationship better fit the data. Thus, quadratic regression equations were conducted utilizing the entire sample, as well as separately for men and women. Regressions were also conducted using Rape Myth Acceptance, or beliefs that serve to deny and justify male sexual aggression, as a theoretically-relevant covariate.

Hypothesis six predicted that the process of motivated inaccuracy leads to increased chances of unwanted sexual activity (i.e., quadrant III in Figure 1, p. 142). More specifically, the likelihood that the sexual encounter involved some amount of unwanted sexual activity by one of the dyadic members is argued to be associated with misperception such that the target does not want to engage in a particular sexual activity (direct perspective of partner 1) but the perceiver believes that they do (inaccurate meta-perspective of partner 2). Several regressions tested the conditions necessary for this prediction. To answer this question, one partner's perceptions about outcome expectancies and their own coping efficacy were used as predictors of the other partner's reports of unwanted sexual activity in regressions. The logic is that those with negative outcome expectancies and low coping efficacy should be the most likely to be motivated to be inaccurate about their partners. Greater inaccuracy should be associated with higher reports of their partner's unwanted sexual activity.

The remaining hypotheses specified direct relationships: that directness of information seeking is positively associated with empathic accuracy (*H7*), and that empathic accuracy is negatively associated with nonconsensual sex (*H8*). One research question (*RQ1*) asked how confident individuals are regarding their ability to discern whether they have obtained sexual consent from their partner. This research question was addressed by assessing means of empathic accuracy confidence. Paired samples *t*-tests were also performed to compare the confidence levels of men and women in the sample.

Four hypotheses included empathic accuracy as one of the variables in the predictions. However, empathic accuracy scores could not be calculated in the way envisioned at the onset of the data collection. To be clear, the methodology for obtaining empathic accuracy scores was not a replication of previously successful studies; it represented a novel hybrid approach to capturing (mis)understanding in a difficult-to-study context: sexual activity. The problems with the qualitative data collected for the empathic accuracy calculations are outlined below, along with the strategy applied to allow an assessment of empathic accuracy that most closely reflected the construct, as intended.

A preliminary review of the qualitative data revealed several limitations that ultimately led to a conclusion that these data were unusable for their originally intended purpose (the assessment of empathic accuracy). The most significant weakness in the data was lack of detail in the participants' descriptions of their own and their partners' thoughts and feelings. Frequently, participants gave one-word responses (e.g., "excited") rather than a detailed description from which coders could assign scores. The lack of detail in participants' responses provided little basis to establish variability across the data points; this prevented empathic accuracy from being scored at all. Likely, this problem could have been

due to an inability to actually retrieve these thoughts and feelings from memory, a lack of motivation to report on them, or a combination thereof. Additionally, the survey instrument was lengthy, and college students tend to participate in many surveys. Previous work has revealed problems associated with participant fatigue in surveying college students (see Porter, Whitcomb, & Weitzer, 2004 for overview of survey fatigue).

While this failure prevented the researcher from having access to a coded empathic accuracy score that reflected traditional strategies for operationalization of that construct, other measures offered insights into the agreement and (mis)understanding between partners in this context (i.e., empathic accuracy). More specifically, the following measures were utilized in these analyses as proxies for the traditional assessment of empathic accuracy: (1) similarity in perceptions of affirmative consent, (2) empathic accuracy confidence, and (3) perceptions of refusal self-efficacy and partner refusal self-efficacy.

Similarity in perceptions of affirmative consent was calculated by subtracting the male and female ratings on the item assessing perceptions of affirmative consent (i.e., "...to what extent do you feel that you both made an affirmative, unambiguous decision to engage in mutually agreed upon sexual activity?", then using the absolute values of that difference score to measure overall agreement. Empathic accuracy confidence was a composite measure from the survey (a percentage; e.g., "I can discern what specific sexual acts my partner consents to engage in;" "I know what my partner is thinking and feeling"). Perceptions of refusal efficacy reflected beliefs about one's ability to say 'no' doing a sexual encounter (direct perspectives) and perceptions about one's partner's ability to say no (meta-perspectives).

Data Preparation

In preparation for data analysis, reliabilities for the variables of interest were assessed and then composite variables were formed. Correlation strength and direction among variables of interest were assessed to confirm the predicted relationships among the variables before proceeding with analyses. Missing data for the dyadic variables of interest, specifically, the TMIM variables that were to be used in the SEMs, were replaced using the expectation maximization (EM) procedure of single imputation utilizing a module in SPSS. In this approach, observed relationships among all the variables are used with an injection of random error to impute maximum likelihood values (Acock, 2005). The "automatic" option available in SPSS's MVA (Missing Value Analysis) module was selected, where an imputation method is automatically chosen based on a scan of the data. This was done in part to avoid listwise deletion, which would reduce sample size and thus, statistical power in an already small sample. Imputation methods have been shown to be superior to alternative traditional methods of data replacement (e.g., pairwise deletion, indicator/dummy variable adjustment, and mean substitution) which are only appropriate under specialized circumstances (Acock, 2005). Single imputation incorporates a random disturbance term for each imputed value to account for the uncertainty associated with the imputation (Acock, 2005). This procedure assumes that missing data are "missing completely at random" (Little & Rubin, 1989-1990, p. 297). The resulting imputed values are then treated as real data points.

After grouping individuals into dyads and matching sexual episodes, there were 96 dyads in the dataset. However, additional dyads were removed from some analyses. Two data files were maintained, and the removal of these additional cases was only done on one

of the files. Cases were excluded from the dyadic file when the number of variables with missing data was too high to allow for accurate imputation of the TMIM variables (7 dyads, $N = 14$). Additionally, 11 same-sex dyads who self identified as LGBTQ ($N = 22$) were removed from the dyadic dataset since the analytic procedure required distinguishing members of a dyad in a systematic fashion (in this case, by sex). This decision was also theoretically- based because examining sex differences was important in the rationale for this study. Following the data cleaning procedures, a sample of 78 dyads ($N = 156$) remained for the dyadic analyses. However, all 96 dyads ($N = 192$) were included in analyses in which the unit of analysis was the individual.

Preliminary Analyses

Confirmatory factor analysis. Prior to specifying a structural model, confirmatory factory analysis (CFA) was conducted (using AMOS 24) in order to investigate the three types of efficacy outlined in TMIM (communication, target, and coping) and whether they formed a single latent efficacy construct. Previous tests of TMIM have also conducted factor analysis due to inconsistency regarding whether the items measuring different types of efficacy from a single latent construct or multiple constructs (e.g., Fowler, Gasiorek, & Afifi, 2016). Some studies have used the different types of efficacy separately in analyses, or have focused on one or more of the types of efficacy, due to poor fit for a single latent efficacy construct (see W. A. Afifi & Afifi, 2009). In the current study, six items were specified as indicators of *communication efficacy*, four items were specified as indicators of *target efficacy*, and two items were specified as indicators of *coping efficacy*. The original model fit was not acceptable, χ^2 (51) =709.18, $p < .001$, RMSEA = .19, CFI = .81. Examination of the paths and modification indices showed that the best fitting model was constituted by

removing the latent factors for target efficacy and coping efficacy, retaining only the items for communication efficacy. Additionally, two items from communication efficacy were also removed that measured direct communication efficacy; the items that remained all measured indirect communication efficacy. As a result of this analysis, a decision was made to retain four communication efficacy items only as the strongest indicators of the latent efficacy construct. The resulting model fit the data well, χ^2 (1) = .05, $p < .001$, RMSEA = .00, CFI = 1.0, and was deemed acceptable enough to utilize as the latent factor for indirect communication efficacy in the structural equation models.

Retaining only items that were indicators of communication efficacy was a decision driven not only by the data (i.e., because communication efficacy was found to be the strongest factor), but it was also theoretical. Historically, support for the different types of efficacy outlined in TMIM has been inconsistent; however, communication efficacy has been the strongest predictor of information-seeking across studies (see Afifi & Robbins, 2015). Due to the nature of common obstacles to initiating conversations in this context, including the adoption of sexual scripts and the tendency to utilize indirect communication, it makes logical sense that communication efficacy would play the most meaningful role in information seeking about consent. Therefore, all SEM analyses involving TMIM only included communication efficacy.

Hypothesis One, Two, Three, and Five: TMIM Applied to Consent Interactions

Hypotheses one, two, three, and five made the following predictions, in line with TMIM: an uncertainty discrepancy regarding a partner's sexual consent is positively associated with anxiety (*H1*); anxiety is negatively associated with outcome expectancies (*H2a*) and perceptions of efficacy (*H2b*); outcome expectancies are positively associated

with efficacy (*H3*), and perceptions of efficacy are related to information seeking (*H5*). Fit guidelines for indices were determined a priori and were used to assess the empirical model's fit with the theoretical model: models should exceed .95 for the Comparative Fit Index (CFI) and be lower than .08 for the root mean squared error of approximation (RMSEA) (see Holbert & Stephenson, 2002). Chi-square was also reported. Maximum likelihood estimation was used to estimate the models. Models were run separately for the measure of information seeking of interest: indirect information seeking.

Model testing. Using the APIM paradigm, dyadic structural equation model was conducted (using AMOS 24) to test these predictions applied to the context of sexual consent. A hybrid model was constructed, in which both measurement and structural parameters are modeled (Stephenson & Holbert, 2003). In order to reduce the number of paths, especially given the dyadic approach to SEM, a decision was made to utilize, in part, the latent composite model type. In this type of model, composite measures of variables may be used, but the technique allows for the researcher to take advantage of latent modeling, which accounts for both random and systematic error (Stephenson & Holbert, 2003). This approach is seen as appropriate for global representations of constructs, and is a technique that Stephenson and Holbert (2003) argue is underutilized in the communication discipline, where much research relies upon observed variable models. As such, in the current study composite variables were created as single-item latent composite indicators for anxiety, efficacy, as well as avoidance (one of the measures for information seeking). Per the latent composite variable technique, the error variance for each of the composite observed variables (treated as single-item indicators regressed onto the latent factors) was fixed to a score computed by multiplying $(1 - \alpha)$ by the variance of the indicator (Bollen, 1989; Stephenson

& Holbert, 2003). This technique controls for measurement error. Single-item indicators measured uncertainty discrepancy, outcome expectancies, information seeking directness, and indirect information seeking; thus, those indicators were treated as observed variables in the models.

The hypothesized model: Indirect information seeking. The hypothesized model (see Figure 3, p. 144) included the TMIM relationships modeled separately for men and women as well as the between-sex dyadic paths suggested by the Actor-Partner Interdependence Model. Before any modifications, the hypothesized model fit the data: $\chi 2(N = 78; df = 20) = 13.07$, $p > .05$, CFI = 1.00, RMSEA = .00.

Tests of mediation: Efficacy as a partial mediator. TMIM predicts that efficacy partly mediates the influence of outcome expectancy's impact on information seeking. To establish efficacy as a partial mediator, zero-order correlations between the variables of interest must be significant, and then it must be established that the mediator accounts for some influence of the predictor on the outcome (Baron & Kenny, 1986). Finally, the relationship between the independent variable and the outcome should dampen with the path added between the mediator and the outcome. If these three conditions are met, a Sobel test (Sobel, 1982) should provide support for a statistical mediation.

Therefore, to establish efficacy's role as a partial mediator, each of the three paths (independent variable to mediator, independent variable to outcome, and mediator to outcome) were first investigated. In the first step in the test of mediation, the association between outcome expectancy (the independent variable) and efficacy (the mediator) was significant for women, $\beta = .50$, $p < .001$, but not men, $\beta = .18$, *n.s*. Outcome expectancy's path to indirect information seeking (the outcome) was significant for women, $\beta = .40$, $p <$

.001 but not men, β = .17, *n.s.* The path between efficacy and information seeking was significant for both women, β = .31, $p < .01$ and men, β = .46, $p < .001$. The addition of the efficacy path decreased the outcome expectancy-to-information seeking association for women, β = .32, $p < .05$. It was insignificant for men, β = .09, *n.s*. Given the evidence of a partial mediation for women, a Sobel test was conducted and confirmed efficacy's role as a partial mediator of outcome expectancy's association with information seeking (Sobel = 2.94, $p < .01$).

The final model: Indirect information seeking. After nonsignificant paths had been removed and modification indices considered, the final model (with indirect information seeking as the outcome; see Figure 4, p. 145) proved to be a better fit to the data, meeting the a priori criteria of fit, $\chi 2(N = 78; df = 47) = 39.31$, $p > .05$, CFI = 1.00, RMSEA = .00. Parameter estimates indicated that relationships between the variables were all in the expected directions. Ratios of chi square values to *df* that are less than two are also indicative of data showing strong fit to models (Tabachnik & Fidell, 2000). The ratio of this final model was .84, indicating a strong fit to the model.

This model indicated partial support of *H1*; uncertainty discrepancy did significantly elevate anxiety for women but not men in the sample. Similarly, anxiety was significantly negatively associated with outcome expectancies for women but not men (*H2a*). Anxiety was significantly negatively associated with perceptions of communication efficacy (*H2b*) for both men and women, although the association was stronger for women. There was some support for the hypothesis that outcome expectancies are positively associated with efficacy (*H3*), as this was true for women but not men. Finally, efficacy is a significant predictor of indirect information seeking (*H5*) for men, but not women. In terms of the paths modeled

from the APIM, female anxiety was a significant predictor of male efficacy, so it was the only dyadic (across-sex) path that was retained in the final model. As a covariate, Rape Myth Acceptance was a significant positive predictor of uncertainty discrepancy for women and a significant negative predictor of indirect information seeking for both women and men.

Hypothesis Four: Uncertainty Discrepancy and Information Seeking

Hypothesis four considered whether the relationship from uncertainty discrepancy to information seeking, in the context of sexual consent, would be better explained by a nonlinear (quadratic) relationship than a linear relationship (as TMIM predicts). Stepwise regression was used to build the models, which allowed for examination of the successive influence of adding or removing variables. This was deemed an appropriate procedure because the predictive influence of the quadratic term for uncertainty discrepancy variable could be compared to the linear influence of uncertainty discrepancy, as well as examining the influence of the covariate. In order to reduce collinearity among the predictors, the raw scores for uncertainty were mean-centered, and the quadratic term for uncertainty was squared after centering (see Dalal & Zickar, 2012 for discussion of centering). Centering the variables in this way results in terms that are pure versions of the orthogonal components they are intended to represent.

Rape myth acceptance (i.e., the covariate) was entered into the first block, (mean-centered) uncertainty discrepancy was entered into the second block, and the (mean-centered) quadratic term for uncertainty discrepancy was entered into the third block, with information seeking as the dependent variable. Three forms of information seeking (i.e., directness, indirect information seeking, and avoidance) were tested as dependent variables. In each regression analysis, any predictors that did not explain a significant amount of

variance on the outcome were removed; the retained variables were used for the final regression. Tests were performed on the whole sample, as well as separately for males and females.

First, regressions were conducted using uncertainty discrepancy as the predictor of information seeking directness. On the whole sample, the final regression model did not include the covariate and revealed a nonsignificant relationship between uncertainty discrepancy and information seeking directness, $F(2, 143) = 1.12$, *n.s.*, $R^2 = .02$. Neither the quadratic term ($\beta = .21$, $t(143) = .43$, *n.s.*) nor the linear term ($\beta = .08$, $t(143) = .18$, *n.s.*) were significant predictors.

Using indirect information seeking as the dependent variable, the final regression model included rape myth acceptance as a covariate and revealed a significant relationship between uncertainty discrepancy and indirect information seeking, $F(3, 170) = 5.63$, $p < .01$, $R^2 = .09$. Rape myth acceptance ($\beta = -.18$, $t(170) = -2.42$, $p < .05$), the linear term for uncertainty discrepancy ($\beta = .27$, $t(170) = 2.35$, $p < .05$), and the quadratic term for uncertainty discrepancy ($\beta = .33$, $t(170) = 2.95$, $p < .01$) were all significant predictors of indirect information seeking. The quadratic term predicted indirect information seeking significantly over and above the influence of the linear term (R^2 change = .05). Thus, a quadratic relationship better explained uncertainty discrepancy's effect on indirect information seeking than a linear relationship.

With avoidance as the dependent variable, the final regression model did not include rape myth acceptance as a covariate and revealed a significant relationship between uncertainty discrepancy and avoidance, $F(2, 175) = 5.75$, $p < .01$. Both the linear term ($\beta = -1.01$, $t(175) = -2.24$, $p < .05$) and the quadratic term ($\beta = -1.15$, $t(175) = -2.96$, $p < .01$) for

uncertainty discrepancy were significant predictors of avoidance. The quadratic term predicted avoidance significantly over and above the influence of the linear term (R^2 change = .04).

In sum, there was some support for the hypothesis; uncertainty discrepancy's relationship to indirect information seeking and avoidance is better explained by a quadratic relationship than a linear one. This was not true for information seeking directness, where uncertainty discrepancy was not a significant linear or quadratic predictor.

Hypothesis Six: Motivated Inaccuracy and Unwanted Sexual Activity

Hypothesis six predicted that the process of motivated inaccuracy leads to increased likelihood of unwanted sexual activity (i.e., quadrant III in Figure 1, p. 142). In normal, everyday interactions where no threat exists, individuals should be highly motivated to accurately infer their relational partner's thoughts and feelings (Ickes & Simpson, 1997, 2001). Put simply, there is no reason *not* to want to understand what is in their partner's head. And in general, perceivers' motivation is positively related to accuracy (Ickes, Gesn, Grahm, 2000). However, in certain situations, accuracy can put individuals in difficult situations in which they would rather avoid having to cope. Theoretically speaking, when an individual believes that a target has thoughts that are "relationship-threatening," he or she has a reason to inaccurately perceive that person – in order to avoid knowing those relationship-threatening-thoughts with certainty and dealing with the consequences (Ickes et al., 2003). A situation of impending sexual activity is precisely one type of situation that is hypothesized to elicit motivated inaccuracy.

Due to weaknesses in the originally-intended measure of accuracy, the rationale underlying the hypothesis was used to select an independent variable that closely captured

the intent reflected in the prediction. Specifically, the notion is that individuals who have an inclination that their partner is not sexually interested may be motivated to discount that perception (motivation to be inaccurate) in pursuit of their sexual or relational goals. If that is the case, then participants who recalled negative expectancies related to their partner's interest in/consent to sexual activity leading up to the identified sexual episode would be more likely to have partners who reported that the sexual activity included non-consensual sexual acts, possible reflecting a process whereby the actor ignored those expectations as part of a drive toward motivated inaccuracy.

Due to concerns with nonindependence of data, separate regressions were conducted for the male and female samples to investigate whether negative outcome expectancies predicted unwanted sexual activity. Regressions were conducted with outcome expectancies regarding how an interaction of consent would go with their partner (e.g., "My expectations about how a conversation about consent with my partner would go were…" *very positive* : *very negative*) as the predictor and unwanted sexual activity (reported by the other partner). Unwanted sexual activity was measured through the item: "What percentage of all the sexual activities in this sexual episode were ones in which you did not want to take part but that you took part in anyway?" Rape myth acceptance was included in the first step of each regression, and was removed if nonsignificant; final models are reported.

The final model for the female sample did not include the covariate showed a nonsignificant association between their outcome expectancies and men's report of unwanted sexual activity during the episode in question, $\beta = -.11$, $t(75) = -.94$, *n.s.*, and the model did not explain significant variance, $F(1, 75) = .89$, *n.s.*, $R^2 = .01$. In contrast, the analysis for the male sample, which also did not include the covariate, was consistent with the prediction,

such that negative outcome expectancies were associated with a higher degree of unwanted sexual activity in the episode, as reported by their female partners, $\beta = -.38$, $t(75) = -3.54$, $p < .01$. This model explained 14% of the variance on unwanted sexual activity, $F(1, 75) = 12.52$, $p < .01$, $R^2 = .14$

Additionally, coping efficacy replaced outcome expectancies (i.e., "I felt like I could handle whatever I might find about my partner's consent") as the predictor of unwanted sexual activity. The logic is that individuals who perceived themselves as having difficulty coping with potential sexual refusal from their partner may be motivated by their sexual goals to look past or ignore resistance cues, reflecting motivated inaccuracy and increasing the chances that their partners report the occurrence of unwanted sexual activity in the episode.

Regressions were again conducted for male and female samples separately. Rape myth acceptance entered in the first step as a covariate of interest, but was removed from the final models because it was nonsignificant for both the male and female sample. Similar to outcome expectancies, results indicated that women's perceptions of coping efficacy were not related to men's unwanted sexual activity, $\beta = .02$, $t(75) = .14$, *n.s.*, $F(1, 75) = .02$, *n.s.*, $R^2 = .00$, but men's perceptions of coping efficacy approached significance as a negative predictor of women's unwanted sexual activity, $\beta = -.22$, $t(74) = -1.95$, $p = .06$. The model for the male sample explained 5% of the variance on unwanted sexual activity, $F(1, 74) = 3.78$, $p = .06$, $R^2 = .05$.

Finally, tests were conducted to examine the combined effects of outcome expectancies and coping efficacy on unwanted sexual activity. Results revealed a significant combined effect of men's outcome expectancies and coping efficacy on women's reports of

unwanted sexual activity, $F(2, 73) = 6.30$, $p < .01$, $R^2 = .15$, explaining 15% of the variance; outcome expectancies was a significant predictor ($\beta = -.35$, $t(73) = -2.90$, $p < .01$) while coping efficacy was not ($\beta = -.07$, $t(73) = -.57$, *n.s.*). Results revealed a nonsignificant combined effect of women's outcome expectancies and coping efficacy on men's reports of unwanted sexual activity, $F(2, 74) = .56$, *n.s.*, $R^2 = .02$. Both coping efficacy ($\beta = .06$, $t(74) = .51$, *n.s.*) and outcome expectancies were nonsignificant predictors ($\beta = -.13$, $t(74) = -1.05$, *n.s.* The covariate was tested in both initial models, but was removed in the final models due to nonsignificance.

In summary, there was some support for the conditions purported to be necessary for motivated inaccuracy to occur, and these conditions were associated with measures of unwanted sexual activity. When men had negative outcome expectancies about conversations about consent, it was associated with higher reports of unwanted sexual activity by their female partners. Additionally, when men reported less ability to cope with a conversation about consent, their partners reported greater occurrence of unwanted sexual activity, although this association was not statistically significant.

Hypothesis Seven: Directness of Information Seeking and Empathic Accuracy

Hypothesis seven predicted that directness of information seeking is positively associated with empathic accuracy. Again, affirmative consent difference was used as the proxy for empathic accuracy. The more positive the score, the greater the partners' disagreement on whether the episode represented an "unambiguous decision" to take part in "mutually agreed upon sexually activity," thereby representing empathic accuracy.

Regression analyses were conducted separately for men and women using information seeking directness as the predictor and affirmative consent difference score as

the dependent variable. Rape myth acceptance was included in the first step of the original models as a covariate and was removed if insignificant.

Women's information seeking directness did not significantly predict affirmative consent difference, $\beta = .10$, $t(76) = .76$, *n.s.,* $F(1, 76) = .59$, *n.s,* $R^2 = .01$. However, men's information seeking directness was a significant negative predictor of affirmative consent difference, $\beta = -.26$, $t(76) = -2.18$, $p < .05$, and explained 6% of the variance $F(1, 76) = 5.05$, $p < .05$, $R^2 = .06$. Rape myth acceptance was nonsignificant and thus not included in these final models.

The smaller the score on the dependent variable, the smaller the difference between men and women's scores on perceptions of affirmative consent – or greater accuracy about (overlap with) their partner's perception. So although the relationship is in the negative direction, this is in the expected direction given that the dependent variable is a difference score (where zero equals perfect overlap or agreement of perceptions). Put differently, men who were more direct in seeking information about their partner's consent were closer to matching their partner's (self-reported) perception of the extent to which the interaction was mutually consensual. Therefore, hypothesis seven was supported.

Hypothesis Eight: Empathic Accuracy and Non-consensual Sex

Hypothesis eight predicted that empathic accuracy was negatively associated with non-consensual sex. In other words, those with more accurate inferences about their partners are expected to engage in a greater percentage of non-consensual sexual activity. Two indicators of non-consensual activity were used as predictors of non-consensual sex in separate regression analyses: *reluctant participation* ("There were sexual activities during this sexual episode in which I participated despite my preference that I not do so.") and

percentage of non-consensual sexual activity ("What percentage of all the sexual activities in this episode were ones in which you did not want to take part but took part in anyway?"). Rape myth acceptance was included as a covariate in in the models as the first step, and was removed from the models if nonsignificant.

The final model for men did not include rape myth acceptance and revealed that affirmative consent difference was a significant predictor of men's reluctant participation ($\beta = .43$, $t(74) = 2.45$, $p < .05$), and the model explained 10% of the variance on the outcome, $F(1, 74) = 8.54$, $p < .01$, $R^2 = .10$. The final model for women retaining rape myth acceptance as a covariate approached significance for women $F(2, 75) = 2.82$, $p = .07$, $R^2 = .07$. Rape myth acceptance was a significant predictor of women's reluctant participation ($\beta = .25$, $t(75) = 2.21$, $p < .05$), but with rape myth acceptance held constant, affirmative consent difference was not a significant predictor ($\beta = -.08$, $t(75) = .70$, *n.s.*).

To further investigate this relationship, the analysis was restricted to those who had a difference score on affirmative consent greater than zero, which included 26 dyads. In other words, this group included dyads who had different scores from one another (disagreed) on that item, excluding those who had the same scores as one another. When testing this group separately, affirmative consent difference was a significant predictor of reluctant participation for men ($\beta = .43$, $t(24) = 2.35$, $p < .05$), and the model explained 19% of the variance on the outcome, $F(1, 24) = 5.51$, $p < .01$, $R^2 = .19$. However, affirmative consent difference as a predictor of reluctant participation was not significant for women, ($\beta = -.32$, $t(25) = -1.69$, *n.s*, and the model did not explain a significant amount of variance, $F(1, 25) = .2.86$, *n.s.*, $R^2 = .10$. Rape myth acceptance was nonsignificant as a predictor in these restricted samples, and thus was not included in the final models.

Affirmative consent difference, excluding rape myth acceptance, was not a significant predictor of percentage of nonconsensual sexual activity for men (β = -.02, $t(75) = -.17$, *n.s.*), and the model did not explain variance on the outcome, $F(1, 75) = .03$, *n.s.*, $R^2 = .00$. The same was true for women, (β = .09, $t(75) = .79$, *n.s.*), and the model did not explain variance on the outcome, $F(1, 75) = .63$, *n.s.*, $R^2 = .01$. Restricting the difference score did not make the regressions significant. In sum, hypothesis eight was somewhat supported, particularly for men, using one of the substitute variable for empathic accuracy.

Research Question One: Confidence in Empathic Accuracy Abilities

The only research question asked how confident individuals are regarding their ability to discern whether they have obtained sexual consent from their partner. This research question was addressed by assessing means of empathic accuracy confidence, the composite measure from the survey (a percentage; e.g., "I can discern what specific sexual acts my partner consents to engage in;" "I know what my partner is thinking and feeling"). The mean scores for men and women were both above 90%, indicating that as a whole, participants in this study were highly confident in their ability to know the thoughts and feelings of their partners in this context. Additionally, a paired-samples *t*-test was used to investigate whether men's and women's self-reported empathic accuracy confidence significantly differed from one another. Results showed no significant difference between women's levels of perceived confidence ($M = 93.48\%$, $SD = 8.37$) and men's ($M = 91.97\%$, $SD = 8.17$); $t(77) = 1.41$, *n.s.*

Supplemental Analyses

Refusal efficacy perceptions. In order to better understand individuals' perceptual accuracy regarding their partner's skills at refusing sexual behaviors in which they do not want to engage, analyses were conducted in order to examine direct perceptions with

partners' meta-perceptions about refusal efficacy (i.e., one's own ability to say 'no' during a sexual encounter and beliefs about one's partner's ability to do so). Lack of significant differences would signify complete accuracy about a partner's perceptions of efficacy in this context. Paired samples *t*-tests were conducted to compare ratings of refusal efficacy between men and women – men's perception of women's refusal efficacy was compared to women's *actual* (self-reported) efficacy, and women's perception of men's refusal efficacy was compared to men's *actual* efficacy.

Results indicate that men's perception of women's refusal ability ($M = 3.83$, $SD = 1.23$) is significantly lower than women's self-reported refusal ability ($M = 4.21$, $SD = .92$); $t(77) = 2.78$, $p < .05$ (two-tailed). In addition, women's perception of men's self-efficacy was compared to men's actual (self-reported) self-efficacy, whereby the reverse pattern emerged: women's perception of men's refusal ability ($M = 4.26$, $SD = .97$) is significantly higher than men's self-reported refusal ability ($M = 3.73$, $SD = 1.18$); $t(77) = 3.94$, $p < .001$ (two-tailed). In other words, men *underestimate* women's (perceptions of their) ability to say no, and women *overestimate* men's (perceptions of their) ability to say no.

Unwanted sexual activity. To further explore the prevalence of unwanted sexual activity in this sample, frequencies were analyzed within-couple for the item that measured the percentage of unwanted sexual activity present in the episode. The goal was to determine how many sexual interactions had at least one person reporting some kind of unwanted sexual activity. It was found that 32% of dyads ($N = 25$) of 78 total had at least one individual in the dyad reporting a percentage greater than zero – indicating that some portion of the sexual activity in the episode had been undesired.

CHAPTER SIX

DISCUSSION

Interaction prior to sexual activity is messy, and anything but straightforward. Sexual partners face the difficult task of interpreting each other's nonverbal behavior, anticipating each other's physical and emotional needs, managing face concerns, communicating affection, considering their own desires and limits, and deciding whether to initiate a verbal discussion (about consent, birth control, and so on) – all while in a state of physical arousal. An unfortunate result stemming from these difficulties (with the acknowledgment that many other factors such as personality are also influential) is that unwanted sexual activity is a common occurrence, especially for college students (see Fedina, Holmes, & Backes, 2016 for meta-analysis of prevalence). The current study was broadly aimed at unveiling the ways in which interpersonal perceptions and communication influence decision making in this context and to identify conditions that put communicators at risk for engaging in unwanted sexual activity with their partners. Unwanted sexual activity may result due to: ignoring resistance cues (a perception problem) or failing to seek consent (a communication problem). Ultimately, information gleaned from this study could be used to inform interventions designed to promote consensual sexual activity and prevent the occurrence of unwanted sexual activity. The study found initial evidence of barriers to seeking information about a partner's consent, that misunderstandings between sexual partners do exist in this context, and that these misunderstandings are associated with unwanted sexual behavior.

The rationale for this study argued that unwanted sexual activity may be, in part, both a communication problem and a problem of inaccurate empathic inferences. The tendencies for individuals to communicate indirectly prior to sexual activity, avoid information searches

from their partners about consent, and fall prey to cognitive biases that lead to errors in judgment all may contribute to the occurrence of unwanted sexual activity. This investigation was grounded in the theoretical positions of the Empathic Accuracy Model (Ickes & Simpson, 1997) and the Theory of Motivated Information Management (Afifi & Weiner, 2004). One unifying thread between these perspectives, addressed by both theories, is the idea that perceived threat (real or imagined) can thwart individuals' intentions – to seek information to reduce uncertainty, or to understand one another (i.e., achieve empathic accuracy).

An additional challenge for men and women understanding one another in this context is that a cognitive bias with evolutionary roots (i.e., Error Management Theory) can lead to errors in judgment, such that men overinterpret sexual intent in women's communication. Furthermore, socially-learned sexual scripts (LaFrance, 2010) may also influence behavior, which prescribe how a sexual encounter "should" unfold. For heterosexuals, the script suggests that men should initiate sexual encounters, women should engage in token resistance behaviors, and men should disregard the resistance (Gagnon, 1999). Taken together, these theoretical lenses underscore the difficulty of communicating and accurately understanding one another in the context of sexual consent interactions. These positions created the foundation for a dyadic empirical test of how consent conversations unfold (or fail to occur), as well as what conditions put partners at greater risk for engaging in nonconsensual sex.

Empathic inference is the process that occurs on a daily basis when individuals try to infer other people's thoughts and feelings; empathic accuracy is the extent to which those attempts are accurate (Ickes, 1997). This study attempted to measure empathic accuracy in

the context of sexual consent, but the data proved insufficient (i.e., had low validity) for this purpose. Failure of the empathic accuracy method forced the analyses to turn to other variables related to (mis)understanding in the context of sexual consent; namely, affirmative consent difference, which represented a gap in understanding between partners' perceptions about the extent to which the episode was mutually consensual.

These data provided insights that contribute toward a body of knowledge aimed at preventing unwanted sexual activity. The results contribute to knowledge about sexual consent in four primary ways: (1) lending initial evidence that misperception about the mutually consensual nature of a sexual interaction exist in a college sample, and these gaps in understanding are associated with unwanted sex; (2) revealing that beliefs about one's own abilities (i.e., communication efficacy) and beliefs about one's social role (i.e., sexual scripts, and gender roles associated with rape myths) meaningfully impact decision making in this context; (3) supporting the idea that an uncertainty management framework has utility in predicting information seeking about consent; and (4) applying a dyadic approach to a socially meaningful, difficult to reach context. The results also suggest new questions and challenges for future research. This study captured dyadic data about a difficult-to-study but practically relevant communication process, paving the way for future researchers innovate new ways to expand the findings and methods to applied research. The following sections will discuss the implications of the findings in greater detail.

Uncertainty Management and Information Seeking

This study positioned information seeking as an uncertainty management strategy that affects one's ability to understand one's partner's feelings about sexual consent, and tested TMIM as a theory to explain this process. As a whole, the study revealed that TMIM does

have utility in the context of sexual consent interactions (or lack thereof). Structural equation modeling tested TMIM using indirect information seeking as the outcome, revealing some significant paths as well as some sex differences. Results provided evidence that sexual encounters are characterized by uncertainty, and provide evidence that evaluations made in the face of this uncertainty influence whether they will seek information from a partner about consent. The tests were conducted using the Actor-Partner Interdependence Model, which allowed the models to account for interdependence of the data. To the researcher's knowledge, no prior tests of TMIM have applied a dyadic frame to its research design.

Indirect information seeking model. As a whole, the model (see Figure 3, p. 144) was a good fit to the data. Uncertainty discrepancy, a gap between how much knowledge individuals have about their partner's consent and how much knowledge they currently hold, significantly raised anxiety for women, but not men. This anxiety in turn was significantly negatively associated with outcome expectancies for women, but not men. It is worth noting that in uncertainty research, the dominant perspective positions uncertainty in terms of individuals possessing *less* knowledge than they want about a particular topic (e.g., Berger & Calabrese, 1975). Thus, uncertainty is typically represented negatively (i.e., characterized by a lack of information). However, as some scholars have noted, uncertainty is conceptualized in other ways besides an information deficit; for example, maintaining a certain level of uncertainty (and sometimes not seeking information) is a requirement for hope (e.g., Brashers, 2007). The TMIM captures this idea with the notion of the uncertainty discrepancy, rather than treating uncertainty as an absolute negative or deficit.

In addition to wanting less uncertainty than they have, individuals may be perfectly content with the amount of uncertainty they currently possess, or they be more certain than

they wish to be. It is worth noting that both are possibilities in the context of sexual consent. Based on the finding that uncertainty discrepancy did not predict anxiety for men, it also plausible that some individuals may have an uncertainty discrepancy (i.e., they have less knowledge about their partner's consent than they wish they did) but this discrepancy does *not* make them feel anxious. Perhaps this kind of uncertainty discrepancy represents an awareness of a lack of knowledge but not one in which emotional processes are engaged. This model suggests that men's information seeking may not originate from feelings of anxiety, instead that other processes may drive their information seeking.

In line with the theory, anxiety was found to be negatively associated with perceptions of efficacy for both men and women in the sample, although the association was stronger for women. In other words, the more anxious individuals felt about their uncertainty discrepancy, the less efficacious they felt regarding their ability to indirectly communicate with their partner about consent. More positive outcome expectancies were related to greater feelings of communication efficacy for women, but not men in the sample. Communication efficacy was found to be a significant predictor of indirect information seeking for men, but not women. However, efficacy was a significant partial mediator of outcome expectancy's association to information seeking for women, but not men.

Actor-partner effects. The SEMs were conducted utilizing the APIM paradigm (using distinguishable dyads) in order to model dyadic dependence, or the fact that scores from individuals within particular dyads should be more correlated than scores from individuals in different dyads (Kenny, Kashy, & Bolger, 1998). In traditional analyses, independence of individual scores is assumed; as a result, if dyadic data are analyzed using individual approaches, parameter estimates and standard errors may be biased (Peugh, DiLillo, &

Panuzio, 2013). In the context of communication about sexual consent, perceptions of one another's sexual interest, relationship characteristics, and uncertainty management strategies are inherently interdependent. Therefore, in this analysis, the model was first tested including all actor paths and all partner paths (e.g., male uncertainty discrepancy predicting female anxiety). However, analysis of the partner paths revealed that female anxiety as a (negative) predictor of male efficacy was the only significant path, and so it was the only path that was retained in the model. Thus, higher anxiety on behalf of females was related to their male counterparts feeling less efficacious about their ability to communicate. Indeed, managing uncertainty related to consent is a dynamic and dyadic process, and the expression of anxiety in a partner may signal additional relational challenges or uncertainties they may need to manage, which the data suggest may dampen their own feelings of efficacy.

Uncertainty's curvilinear relationship to information seeking. This study applied an uncertainty lens in order to identify obstacles to individuals seeking consent. In a departure from the predictions associated with TMIM specifically, a curvilinear relationship between uncertainty and information seeking was hypothesized. Results provided some support for the idea that a curvilinear relationship may better explain the relationship between uncertainty discrepancy and information seeking.

Practically speaking, this idea suggests that those who experience a moderate level of uncertainty (discrepancy) about a partner's interest in a particular sexual act will be the most likely to seek information from their partners, and that those with low and high levels of uncertainty will be less likely to do so. The findings revealed slightly different patterns for the three measures of information seeking (directness, indirect information seeking, and avoidance). With information seeking directness as the outcome, uncertainty discrepancy

was not a significant linear or quadratic predictor. When examining indirect information seeking as the outcome, the significant quadratic term emerged that predicted indirect information seeking over and above the influence of the linear term. Similarly, a significant negative quadratic relationship was revealed with avoidance as the outcome, predicting indirect information seeking over and above the linear term.

As a whole, these data provide some support for the hypothesis and suggest interesting new avenues for future research. TMIM suggests that those with the lowest levels of uncertainty discrepancy should be more likely to carry out information seeking efforts because they should feel more efficacious than their high-uncertainty-discrepancy counterparts, whose efficacy becomes depressed by the uncertainty-related anxiety they feel. Instead, this study hypothesized (and supported) the idea that those who have the lowest levels of uncertainty discrepancy are not the most likely group to seek information in the context of sexual consent.

The rationale for this study suggested that it is not necessarily because they feel unable to engage in the conversation (i.e., low levels of efficacy), but rather because they can easily reduce uncertainty heuristically by relying on sexual scripts (La France, 2010) to "fill in" information about their partners' internal states. In doing so, they conveniently avoid the process-related costs of direct information seeking, which poses the risk of potentially unveiling new uncertainties or facework (Goffman, 1955) concerns they may have to cope with and manage. Because of these barriers, individuals may choose to seek information in an indirect way, or avoid seeking altogether. Indeed, seeking information directly from a relational partner is the most efficient way to manage uncertainty, but is typically considered the information seeking strategy that is least sensitive and appropriate (Berger & Kellerman,

1994). The curvilinear relationship between uncertainty discrepancy and information seeking suggests that a moderate uncertainty discrepancy, relative to a small uncertainty discrepancy, might be needed to motivate communicators to engage in the costly and sensitive (in terms of face concerns) process of seeking information about consent – even though their efficacy to do so might be somewhat depressed. Perhaps those experiencing a small uncertainty discrepancy can be "explain it away" by relying on sexual scripts or other heuristics to fill in gaps of information.

In terms of application, the curvilinear relationship also suggests that if the goal is to promote conversations about consent, having either too much or too little uncertainty about what a partner consents to will thwart the motivation to seek that information. Participants in this study were highly confident of their ability to accurately understand their partners – with a mean score of over 90% on a scale where 0% indicated no confidence at all and 100% indicated complete certainty. Specifically, participants were also highly confident that they know exactly what their partners consent to, yet there was also data suggesting that this overconfidence may not be warranted, given that some unwanted sexual activity is still occurring.

Thus, intervention efforts should inform individuals of this tendency, which aligns with research that finds that individuals are overconfident in their abilities to understand their relational partners (Kenny & Acitelli, 2001; Sillars & Scott, 1983) and tend to lack meta-awareness about this deficit (Ickes, 1993). In response, the goal would be for individuals to re-calibrate their sense of how much they believe they know about their partner's consent, which should in turn promote information seeking efforts. Conversely, those who have too much uncertainty may also abandon an information search because it appears too costly. Or,

as previous work suggests, they may opt to "bargain" for sexual interest in ambiguous and confusing ways that are strategically veiled (Farris et al., 2007). Communicating indirectly allows them to gauge interest and anticipate whether their feelings will be reciprocated; they can then use this information to change their information seeking strategy if need be.

Importantly, in the context of sexual consent, this negotiation to reduce uncertainty about what and if they consent to specific sexual activities may raise *new* uncertainties that the individual is then forced to manage – questions about previous sexual partners/experiences, STI status, the use of birth control, and so on. Indeed, the idea that reducing uncertainty about one topic begets new uncertainties is a challenge – practical and theoretical – addressed by uncertainty researchers (see T. D. Afifi & Afifi, 2009). As evidenced by these data, it is useful to think of information seeking in the context of sexual consent negotiations as an ongoing process with cascading challenges for communicators, rather than as a one-off information exchange.

(Mis)understanding and Sexual Consent

Motivated inaccuracy. This research contributes to the body of knowledge about misunderstanding in the context of consent interactions in several ways. First, it provided evidence that the cognitive process of motivated inaccuracy may be occurring in this context, and that it is linked to behavior. In everyday interactions, individuals should be highly motivated to know the contents of their relational partner's thoughts and feelings. Work on empathic accuracy has found that in general, motivation to accurately infer the thoughts and feelings of one's partner *is* positively associated with increased accuracy (Ickes et al., 2000). However, there are situations in which individuals may have reasons to not understand their

partners accurately – and the rationale for this study positioned the context of sexual consent as one such situation where this is a possibility.

The Empathic Accuracy Model (Ickes & Simpson, 1997, 2001) suggests conditions under which a perceiver's accuracy will be dampened: (a) when the thoughts and feelings are purported to be distressing, (b) when the cues that signal those thoughts and feelings are ambiguous, and (c) when the perceiver feels threatened by the consequences of these accurate inferences. In these cases, the theory suggests that perceivers may shift to a "motivated inaccuracy" set, whereby they sabotage their own ability to be accurate. This is similar to TMIM's theoretical notion that those who are most uncertain about a topic, when considering negative expectations for how an interaction may unfold, abort the information search altogether. In the present context, those who suspect their partners may not be sexually interested or may not provide their consent for the desired sex act may be motivated to do what they can to *not* know their partner's perspective with certainty. And if that is the case, those who fall prey to motivated inaccuracy should be more likely to engage in sexual activity that is unwanted by their partner, because they will not be vigilant for nonverbal cues or other communication that signals this to them. Following the tenets of the theory, if accuracy should be diminished when the target's thoughts are perceived to be distressing, those who report more negative outcome expectancies should be less accurate. Furthermore, if accuracy should be diminished when the perceiver feels threatened by the consequences of knowing the thoughts, those who report lower levels of coping efficacy should be less accurate. The consequence of lower accuracy should be the possibility of a false positive – assuming that the partner wants the sexual activity when in actuality, the sexual activity in question is unwanted.

These data were able to support the conditions outlined for motivated inaccuracy to occur, and these conditions were associated with reports of unwanted sexual activity. Regression revealed that men's perceptions of outcome expectancies were a significant negative predictor of women's reports of unwanted sexual activity. Men's perceptions of coping efficacy approached significance as a negative predictor of women's unwanted sexual activity. When these predictors were combined into a multiple regression, they explained 15% of variance on the outcome. In other words, the less men perceive themselves able to cope with conversations about consent, and the more negative their expectations about how a consent conversation may unfold, the more their female partners reported the occurrence of unwanted sexual activity. In the regression that investigated the combined effect of men's outcome expectancies and coping efficacy, the model explained 15% of the variance on women's unwanted sexual activity. Regressions using females' outcome expectancies and coping efficacy as a predictors of males' reports of unwanted sexual activity were found to be nonsignificant. Thus, the study found evidence that the process of motivated inaccuracy may be occurring among men, but not women.

Theoretically, the finding that men may be making this error aligns quite well with what one might predict through an evolutionary lens. Error management theory (EMT) suggests that men are cognitively biased to overperceive sexual interest in women because the costs of a missed sexual opportunity outweigh the costs of a false alarm, but this should not be the case for women (Haselton & Buss, 2000). In other words, a bias toward assuming sexual interest results in greater reproductive success for men. In terms of motivated misunderstanding, men who are uncertain but suspect their partner may be uninterested in consenting to/engaging in sex (i.e., negative outcome expectancies) may still discount cues

that signal them of this and instead rely on a time-tested heuristic: *assume* her sexual interest, even if it is a "false alarm." As a result, they ensure that they will not miss a mating opportunity. Relying on this bias is, in essence, enabling motivated misunderstanding to occur. And as hypothesized, this is linked to women's reports of unwanted sexual activity. To be clear, the premise of these findings are presented without actual empathic accuracy scores, but nonetheless, the logic still follows along the lines of what the Empathic Accuracy Model would predict. While the causal order of these variables cannot be determined by this study, these data support the notion that beliefs about one's own abilities (i.e., coping efficacy) and beliefs about the threat posed by knowing the contents of another's mind (i.e., outcome expectancies) – as well as the potential influence of evolutionary pressures – can set up the conditions necessary for motivated inaccuracy to occur in the context of consent.

Directness as a predictor of affirmative consent difference. One prediction was that directness of information seeking (of the perceiver) would be positively associated with empathic accuracy in inferring the mental states of their partner. This prediction was rooted in the idea that accuracy should be affected by the clarity or ambiguity of the cues that signal that partner's thoughts and feelings (Ickes & Simpson, 1997, 2001). In other words, the target can make him/herself an easy-to-understand target, or a more difficult one. Because sexual consent negotiations can make people feel sensitive to social threats (i.e., rejection), it is reasonable to assume that some people will be strategically ambiguous about their inner states in this context, and thus, more difficult to "read." At the risk of stating the overly obvious, one way that the perceiver may affect the readability of his/her target is by *communicating* with the target in a way that elicits more direct expressions of those inner states, such as asking that person if and what he/she consents to do. Conversely, those who

choose not to ask their partner about consent and prefer to observe their partner's nonverbal behavior for cues to make those inferences potentially run a higher risk of inaccuracy.

Affirmative consent difference was used as a proxy for empathic accuracy; this variable captured a difference in perception between sexual partners on the extent to which they believed the interaction was mutually consensual. In a sense, this variable acted as a meta-perception of empathic accuracy, because it is truly a statement about how much understanding each member of the dyad assumes they have achieved in a consent negotiation. This study found support for information seeking directness as a negative predictor of affirmative consent difference for men but not women. What this means is that men who reported being more direct in their consent information seeking efforts tended to have perceptions that more closely aligned with their partner's in terms of affirmative consent. While this finding is encouraging for communication scholars because it underscores the importance of talking about consent in achieving understanding, this study cannot determine directionality of this effect. It is also plausible that dyads who understand each other better in terms of their sexual preferences and limits tend to be more open and direct in the way they approach this topic. That possibility is an empirical question.

Affirmative consent difference as a predictor of non-consensual sex. One hypothesis predicted that empathic accuracy was negatively associated with non-consensual sex. In other words, those who infer the thoughts and feelings of their partners more accurately should be less likely to engage in non-consensual sexual activity. Because empathic accuracy was not measured as planned, affirmative consent difference was utilized as the predictor. This variable was created by calculating the absolute value of a difference score between men and women's perspectives on the extent to which they had engaged in

mutually agreed upon sexual activity. Thus, dyads who have a difference score greater than zero are dyads who do not agree on this item; at least one of the individuals reported that the sexual encounter was less than completely mutually consensual.

Greater difference scores were found to predict reluctant participation, one of the indicators of non-consensual sex, for men, but not women. In other words, men who were members of dyads with larger differences between their perceptions of affirmative consent were more likely to report engaging in sexual activity in which they were not totally comfortable. When the analysis was restricted to only those who did have an affirmative consent difference score greater than zero (excluding those for whom a disagreement did not exist), this relationship was amplified. In this model, affirmative consent difference explained 19% of the variance on reluctant participation. When percentage of nonconsensual sexual activity was replaced as the outcome variable, this relationship was nonsignificant. The significant finding with respect to reluctant participation underscores the need for individuals to accurately understand one another in the context of sexual consent. Previous work has found that understanding one another is associated with social competence and relationship quality (Hall et al., 2009), and generally promotes stability in relationships (Ickes, 2003).

Understanding Sexual Consent Interactions

Above all, this study illuminated the complex nature of sexual consent interactions; providing, obtaining, and accurately understanding consent is a complex social process that goes far beyond "yes" and "no." Findings from this research underscore the need for more nuanced approach to consent interactions – and consequently, to any future interventions. It can be tempting to think of sexual activity as "wanted" versus "unwanted" – "consensual"

versus “non-consensual” – but these data point to grey areas and mismatched perceptions within a given dyad. It was found that individuals may not label an entire episode as unwanted, and may not even feel any intense negative feelings toward their partner. But evidence from this study suggests that there are elements of a given sexual interaction that a large percentage of individuals feel uncomfortable with, and this is in a happy, satisfied sample.

Jozkowski et al.’s (2014) study revealed that while college students define consent in the abstract as explicitly communicated agreement, they also admitted to sending unclear or ambiguous messages about their own consent, as well as relying on nonverbal cues to infer their partner’s consent. In a similar apparent hypocrisy, a large majority of this sample reported that they did provide information about their consent to all sexual activities (M = 6.49, see table X), and that they were highly confident knowing what specific acts their partner consented to (M = 96.53%), but yet there were still differences in perceptions of affirmative mutual consent and some evidence that unwanted sexual activity was still present in this sample. It appears, then, that people’s confidence in this context is somewhat unwarranted.

Analyses of refusal efficacy comparisons revealed intriguing sex differences. Participants in the study were asked to rate their perceptions of their own ability to say ‘no’ (i.e., refusal efficacy) during a sexual encounter in different scenarios (e.g., *...when your partner is pushing you*, *...after you have been drinking alcohol*, *...when you don’t feel like it*). When their direct perspectives were compared to meta-perspectives, men *underestimated* women’s (self-reported) ability to say no, and women *overestimated* men’s (self-reported) ability to say no. In other words, men were less sure that their partners had the ability to say

no to sex than women felt about their own abilities. Conversely, women were more sure that men would be able to say no if they were not interested in sex than men actually felt about their own abilities. This might be interpreted in a few ways.

First, previous research has consistently documented men's tendency to attribute greater sexual meaning to behavior than women intend; explanations for this span social learning to gendered scripts to evolutionary pressure toward bias (Farris et al., 2007). Therefore, one explanation for men being unsure if women have the ability to say no is that they may interpret neutral nonverbal behavior as requesting, suggesting, or consenting to sex; thus, men may be inaccurate about how often their partners are actually interested in sex. This may in turn affect perceptions of their partner's ability to refuse. Furthermore, endorsing beliefs about rape myths, or false beliefs about rape rooted in sexism (Burt, 1980), may also contribute to this discrepancy in perspectives. An example of this type of belief would be that the way a women dresses or behaves is indicative that she asked for it (i.e., to be raped). Although the mean scores were low for both men and women, men did endorse beliefs accepting rape myths to a significantly greater extent than women. In line with beliefs about sexual scripts, women may believe that men have greater efficacy than they do because at some level, they may assume that men are "in control" of the sexual encounter. As such, women assuming a more passive role in line with sexual scripts may represent a kind of accommodation, whereby individuals adjust their communication in response to another's group membership (see Giles, 2016). It is even possible that both men and women may accommodate toward the social roles embedded in sexual scripts in an attempt to be evaluated positively by each other.

An alternative possible explanation for men underestimating women's ability to say no is that it is a bias born out of self-protection – protection from being accused of perpetrating sexual assault. At first glance, this may seem like an extreme stance. But it is reasonable to imagine that a modern-day bias toward being cautious when proceeding sexually (because of a belief that women have a hard time saying no) could be beneficial for men who fear making an inferential error. Interestingly, this appears to contrast with what one might predict based on Error Management Theory (Haselton & Buss, 2000). Again, on the basis of evolutionary processes, EMT states that a bias toward sexual overperception for men developed because it minimizes the cost of making reproductively costly errors. In other words, it maximizes the chance that men will be able to spread their genes by reproducing by ensuring they do not "miss" a chance at a mating opportunity.

As a final thought, it is noteworthy that rape myth acceptance, even if subtle (see McMahon & Farmer, 2011), is affecting the thought processes of contemporary college students in meaningful ways tied to their communication and sexual behaviors. Present-day sexism is likely not overt, but even in its subtle form, can powerfully guide expectations about how a sexual encounter should unfold – including the communication or lack thereof.

Limitations and Future Directions

Empathic accuracy method. The method for measuring empathic accuracy was a limitation in this particular study, but the potential reasons why this failure occurred illuminates areas for future research. First, this study attempted to measure social cognitive processes in a difficult, intimate context which practically speaking, cannot be recreated in a laboratory setting. This attempt to apply a new research design may challenge future researchers to consider new ways to measure empathic accuracy in more naturalistic settings.

The variables that were used to approximate misunderstanding were variables that participants appeared to have more "access" to relative to their specific thoughts and feelings during an event that requires many physical and emotional resources. Of course, the items that were used in place of the original measure were also closed-ended, rather than open-ended, items – which may have just been easier to answer.

The failure of the empathic accuracy method underscores several things already known in research on interpersonal perceptions and highlights a few new challenges. First, it suggests that individuals may lack certain meta-knowledge about their own thought processes, with this being amplified in certain contexts. However, people are quite confident in their ability to accurately infer the thoughts of others, as evidenced by the very high accuracy confidence scores. Additionally, it is possible that participants do have some awareness of their thought processes as they negotiate (or choose not to negotiate) sexual consent – but chose not to report it. Clearly, the information being requested of them was quite personal in nature, and some may have simply felt uncomfortable disclosing it. The survey, which was quite long, may have been too cumbersome for participants to focus on the empathic inference items in detail. A third possibility is that even if these processes are truly occurring, they are occurring below one's level of awareness.

One methodological shift that may help overcome some of these obstacles is to measure empathic inferences via talking about the sexual episode, rather than writing about the experience. Because these experiences are anything but straightforward and linear and are instead characterized by many layers (i.e., indirect communication, physiological arousal, continually reassessed inferences about one another, and shifting goals), it may simply be easier to "tell the story" of what happened. For example, researchers could potentially

provide participants with a prompt of questions to answer that guide them in retelling the story of the experience, and have them record audio of themselves talking about it. The prompt could also include questions that ask them to comment on their own thoughts and perceptions of their partner's thought processes. The recording could then be returned to the researcher for analysis. This would be similar to video-assisted recall procedures that have been successful in other studies of empathic accuracy, such as work on parent-adolescent conflict (see McLaren and Pederson (2014) and Sillars, Koerner, and Fitzpatrick (2005) for examples). The major methodological difference in the context of sexual consent is that the interaction itself cannot occur in the laboratory. However, a shift to audio recordings that more closely approximate the video-assistant recall method may still improve the success of the modified empathic accuracy method.

Another limitation to the study was the lack of power in some of the analyses. In part, this may be due to the small sample size for the study, which was restricted in order to obtain dyadic data in which the participants reported on the *same* sexual episode. While successfully recruiting this (albeit small) sample was a strength of the study, it is imperative to highlight the nature of this sample as it has implications for interpreting the findings. Although unwanted sexual activity was an important variable in the current study, participants were not recruited on this premise; the study recruited individuals who were sexually active with someone, comfortable discussing it, and whom could recruit their *partners* to also participate in a survey. The dyadic nature of the study naturally biased the sample toward people who were comfortable enough with their partners to ask them to take a survey about their sex life. This also made it less likely that individuals will report on one-

night-stands, or first time sexual encounters with new relationship partners; indeed, only 8% of this sample reported on a first-time sexual encounter.

Thus, participants in this sample are mostly satisfied in their relationship with their sexual partner, and reported on sexual activity that they were comfortable with. Ratings on the item: "Everything that happened in this episode was something I wanted to happen" on a scale of *1 - 7*, were high ($M = 6.30$, $SD = 1.19$). Due to the qualities of this particular sample, the fact that misunderstanding, unwanted sexual activity, and barriers to seeking consent were meaningful variables suggests that these struggles are likely much more common in the population (even if projecting to college students only). As such, the findings are noteworthy given that the sample was relatively happy, and reported on mostly wanted and consensual sexual activity.

Presumably, those who struggle more with unwanted sexual activity and misunderstanding in negotiations of consent are less comfortable reporting on these events in a survey, and less comfortable convincing their partners to do the same. Expanding this work to a larger and more diverse sample may amplify some of the results. This study has provided initial evidence to encourage researchers to test these associations in a sample with greater variation in difficulty communicating and understanding consent. For example, studying individuals who have just engaged in their very first sexual encounter would be a fruitful endeavor. In a different vein, this study focused primarily on heterosexual dyads due to the dyadic data analytic strategy; clearly, future work should include LGBTQ dyads in work on consent interactions.

It is also important to acknowledge that this sample was young, college-educated, and American. Thus, the findings may or may not apply to other cultures, older individuals, and

those not in a college environment. Attitudes about sex and sexuality are deeply culturally-embedded (Ford & Beach, 1951), so it is likely that attitudes about consent and communicating around sex might be different if tested in other countries, across different generations, or even in different subcultures within the United States. While evidence of gender roles can be found across the world, some cultures are less open in terms of sexual freedom, and thus attitudes about sexuality reflect more traditional gender roles and values, as seen in Higgins, Zheng, Liu and Sun's (2002) comparison of attitudes in China (more traditional) and the United Kingdom (more liberal). Other work suggests that differences in attitudes about sexuality are more multifaceted than a simple permissive-nonpermissive dichotomy; Widmer, Treas, and Newcomb's (1998) large study across twenty-four countries found that attitudes about nonmarital sex differed by country in terms of beliefs about the wrongness of sex before marriage, sex before age 16, extramarital sex, and homosexual sex. Thus, the existence of diverse moral compasses and expectations for sexual activity suggest that this study's findings may be different if conducted cross-culturally.

Certain subcultures may also practice certain norms and hold culturally- bound attitudes. For example, recent work found that the bondage and discipline/dominance and submission/sadism and masochism (BDSM) community has higher norms of affirmative consent and lower rape-supportive beliefs (including rape myth acceptance) than those who do not identify with being members of this community (Klement, Sagarin, & Lee, 2016). Therefore, examining intergroup differences in these attitudes, communication, and sexual practices would be a fruitful avenue for future research, as intervention strategies may require unique approaches per group membership. The important point is that these attitudes and behaviors are not fixed, and may differ widely depending upon culture.

Future researchers should also consider embedding items measuring aspects of consent interactions into surveys about a broader range of topics, in order to avoid drawing too much attention to the topic of consent. One issue that may have inhibited this study may have been priming, whereby once participants became aware of the study's overarching focus on sexual consent, they may have been motivated by the pressures of social desirability or by identity concerns to report that they did seek and obtain consent from their partners, even if this was not the case. It is also reasonable to assume they anticipated a conversation with their sexual partner about the survey after both of them had completed the study. Anticipation of this future (uncertain) event may have led them to report events in a more desirable way for their self-identity, or in a way that would prevent them from lying to their partners about their recorded responses (e.g., if a female reported a large percentage of unwanted sexual activity but would not want to disclose this to her partner). Ironically, participation in the survey could have uncovered new uncertainties for participants to manage relationally.

However, the study itself prompting a conversation about consent interactions within the dyads who participated – a sort of meta-discussion about consent negotiations – is an intriguing possibility. Could it be that those who participated in this study subsequently realize that they lack clarity from their partner in terms of understanding exactly what they consent to, and what type(s) of sexual activity are desired/unwanted – and then *change* their sexual communication with that partner as a result?

Follow-up study. In anticipation of this possibility, a follow-up study was designed and conducted in which participants of this study were contacted to see if they were interested in participating in a short follow-up individual survey; their partner's participation

was not required. In essence, the study served to answer the open research question of whether exposure to questions about the details of their consent interactions in this study acted as a prime with positive effects on participants' future sexual communication. To act as a control group in the study, another group of students was recruited to also participate who had *not* participated in the first study.

In the survey, participants were asked about whether they discussed the content of the survey and if they had talked specifically about sexual consent with their partners (who had participated in the prior study); information about the qualities of their relationship; and reports of their sexual communication satisfaction. They were also asked open-ended questions about how they would define sexual consent (e.g., "We'd always ask each other and receive a verbal yes or smile or nod"; "A reciprocation of touching and kissing"; "We have a secret wink that we pretty much use when either of us is turned on and ready to go for action"), what communication indicate non-consent from their partner (e.g., "Tension, resistance and hesitance"; "Verbal use of the word no, or lackluster body language"; "Verbal no or just generally withdrawn behavior"), how they would ask for it, and how they would communicate consent (e.g., "I would clearly state I was comfortable with it"; "I'd slowly go for it") and how they would communicate non-consent (e.g., "Push hand away or turn away;" "I would tell them I wasn't in the mood;" "I would say no"). Additionally, they were asked what they would look for in their *partner* to indicate consent and non-consent. In addition to analyzing the content of these responses, the questions were also designed to investigate whether there is any difference or discrepancy between what individuals report communicating to their partners versus what they look for in their partners' communication.

An initial overview of follow-up data reveals some findings that are encouraging, and others that are alarming. When asked if and how participation in the study affected the way they communicated with their partner about sex, one participant said, "We started communicating more." Another said "We were much more open and mature about the subject matter." Of course, some participants said it did not affect their communication, but this may be a matter of lack of meta-awareness. As such, there is some evidence that the study may have altered communication patterns among participants. In a different vein, when asked if they have ever found themselves in a situation where they engaged in sexual behaviors they were not completely comfortable with (similar to what was measured in Study 1), 47% of participants ($N = 53$) indicated *yes*, while 53% indicated *no* ($N = 60$). If they answered yes, they were asked to elaborate on what happened if they were comfortable. Unwanted sex described in the qualitative responses often included mentions of alcohol (e.g., "I was drunk at a party and this guy started making out with me and touching me and I couldn't move away") as well as specific sexual acts that individuals were uncomfortable partaking in (e.g., "The first time I had anal sex it was with a guy I didn't want to have sex with, but he kind of forced me to it"). The detailed results of this study are the focus of a separate manuscript but suggest important avenues for additional investigation and intervention.

The large percentage of individuals who reported engaging in unwanted sexual activity – in the dissertation as well as in the follow-up study – brings to light a critical distinction that needs to be better explicated in future work: wanted/unwanted sex versus consensual/non-consensual sex. While it is tempting to equate unwanted sex with non-consensual sex and wanted sex with consensual sex, these data as well as extant literature

suggest a more nuanced approach would capture more variability in experiences. To more closely align with the real-life experiences of sexual partners, one possibility is to position wanted/unwanted and consensual/non-consensual as two separate, orthogonal dimensions, with four quadrants of different experiences (i.e., wanted and consensual, wanted and non-consensual, unwanted and consensual, and unwanted and non-consensual). And to point out a simple but meaningful distinction, sex that is consensual is not the same thing as sex that is wanted.

For example, consider that a sexual episode may be consensual between partners, but may contain sexual acts, or may be in its entirety, unwanted by one partner. Why might individuals consent to engage in sex that is unwanted? One reason may be simply to please their partner. Scholars have noted the expression of deceptive affection (see Horan & Booth-Butterfield, 2013) is common in romantic relationships, whereby participants lie about how they feel about a situation or about their partner in order to achieve certain goals – face-saving, conflict management, and emotion management. Feelings of affection and the expression of affection may not always align. More specifically, relational partners often engage in sexual compliance, whereby they feign sexual desire, in order to enhance the relationship or to avoid conflict (Katz & Tirone, 2008). For example, a wife complies with her husband's bids for sexual attention even though she is exhausted and uninterested. Is this non-consensual? No, certainly not. But it is not necessarily wanted. These kinds of relational maintenance behaviors may be common – deceptive affectionate messages occurred on average three times per week in Horan and Booth-Butterfield's (2013) diary study. Some of the data in the present study suggest that this kind of situation may have been occurring, although it was not measured as such.

Consent can range from active to passive; sexual activity can range from being completely wanted to completely unwanted. These dimensions are also fluid, and may even (and probably often) shift *within* a particular sexual episode. In other words, a bid for sexual attention may begin with resistance from a partner who does not want to initiate, but a partner's communication may change her/his mind toward sexual interest – at which point the initially unwanted sexual activity becomes wanted. However, more problematic situations also occur, such as when sexual activity is at first wanted, but then becomes unwanted for whatever reason – after a certain amount of time, or progressing to a specific sexual act. In either of these scenarios, the sexual activity may be consensual or nonconsensual, which may be communicated by one or both partners, or not.

Future theoretical development needs to consider the many grey areas of consent and desire, and focus on multiple potential dimensions when measuring consent, communication, and the cognitive states of sexual partners. Furthermore, and perhaps more importantly, future work must carefully consider the *practical* implications of separating desire (wanted/unwanted) from consent (consensual/non-consensual) in defining and explaining unwanted sexual activity and rape – and how that might affect legal proceedings of sexual assault and rape accusations. Bensussan (2009) critically analyzed the difficulties faced by judges and psychiatric experts in evaluating the plaintiff's consent and refusal, as well as the defendant's perception of consent or refusal, and concluded:

> It is essential that the lawyers, judges and experts working on such cases be very careful in not confusing absence of desire and absence of consent, as the most radical of feminists sometimes demand with vehemence (Mathieu, 1985). Otherwise, given the number of times during a married life a couple has sexual relations endured

> without either desire or pleasure, purely to alleviate tension or avoid bad moods, we had better start recruiting more judges. And building more prisons. (p. 185)

This quote, and the misunderstanding between partners identified in the study, point to a need for greater precision in theoretical definitions and in practice. Indeed, if the "ideal" sexual experience contains affirmative mutual consent being continually communicated during sexual activity, how much sexual activity *could* be – and should be – classified as unwanted/sexual assault/rape? This is an additional challenge for researchers and practitioners who want to prevent (and accurately identify) unwanted sexual activity. What is the difference between consent that is felt or understood between partners and consent that is explicitly communicated? And what is the ideal way for desire and consent to be treated by the legal system (i.e., such as in rape cases)? Throughout any future theoretical development, scholars should continually reassess the implications of their chosen approach for education (e.g., teaching individuals best practices of communicating and obtaining sexual consent and sexual assault prevention) as well as who would be labeled perpetrators by the chosen operationalization.

Applications of the study. The study positions misunderstanding as one reason for the occurrence of mismatched perceptions of consent and consequently, unwanted sexual activity. Importantly, this absolutely does *not* suggest that perpetrators of sexual assault are not at fault because sexual assault is simply "a misunderstanding" and thus blame cannot be assigned. Misunderstanding is seen as one factor situated within a larger context of broad societal messages about sexual roles, the pressures of evolution, and other factors in which interactants *do* have some control – via the decisions they make about whether or not (and how) to *communicate* with their partners about sexual consent. Indeed, because of this,

communication scholars are in a unique position to assist in designing interventions that are communication-focused, empowering individuals to equip themselves with the skillsets necessary to successfully negotiate consent. Promoting awareness of common biases and tendencies toward overconfidence, as well as work to address barriers to information seeking efforts in this context, should help equip individuals with skills they need to interact with their sexual partners – and avoid unwittingly engaging in sexual activity that is unwanted by their partner.

One intriguing future direction along this line would be to experimentally test whether interventions of awareness would improve understanding in this context, similar to interventions that have been conducted on the bystander effect (see Banyard, Plante, & Moynihan, 2004). For example, an educational intervention could inform individuals of a summary of the study's most noteworthy findings: (1) that individuals often misperceive that their sexual encounters are completely mutually consensual, and this misperception is associated with unwanted sexual activity; (2) that many people report that some aspect of their sexual interactions made them uncomfortable, juxtaposed with the majority of individuals reporting that they did ask for consent and did provide their own consent; (3) the tendency toward unwarranted overconfidence of achieving understanding of their partner; (4) that negative outcome expectancies and low communication efficacy are barriers to people seeking information about consent; (5) that rape myths, even if subtle, influence individuals' thought processes and decisions around consent in meaningful ways; (6) relevant sex differences unveiled in the study (e.g., the idea that men underestimate women's beliefs about their ability to say no, and that women overestimate men's beliefs about their ability to say no). An intervention could also focus on improving communication efficacy in this

context, which was identified as one barrier to seeking information about a partner's consent. Clearly, sexual consent is an area of research ripe for socially meaningful applications, as well as a focus on understanding its theoretical underpinnings.

Conclusion

The current study challenges communication researchers to apply dyadic analysis to work addressing difficult conversations, and specifically to pre-sex communication, where communicators face the difficult task of negotiating sexual consent. This research identified barriers to seeking sexual consent from a partner, as well as identified conditions under which unwanted sexual activity is more likely to occur. The study supported the idea that unwanted sexual activity is more likely to result when sexual partners have misaligned perceptions – and there is some evidence that individuals are unaware that this misunderstanding is occurring. In sum, difficulty negotiating sexual consent is the product of a problem of misunderstanding and a problem of communication. Findings from this study can inform future interventions designed to promote consensual sexual activity and prevent unwanted sex.

References

Abbey A. (1982). Sex differences in attributions for friendly behavior: Do males misperceive females' friendliness? *Journal of Personality and Social Psychology*, *42*, 830–838. doi:10.1037/0022-3514.42.5.830

Abbey A., Cozzarelli C., McLaughlin K., & Harnish R. J. (1987). The effects of clothing and dyad sex composition on perceptions of sexual intent: Do women and men evaluate these cues differently. *Journal of Applied Social Psychology*, *17*, 108–126. doi:10.1111/j.1559-1816.1987.tb00304.x

Abbey A., & Harnish R. J. (1995). Perception of sexual intent: The role of gender, alcohol consumption, and rape supportive attitudes. *Sex Roles*, *32*, 297–313. doi:10.1007/BF01544599

Abbey, A., Jacques-Tiura, A. J., & LeBreton, J. M. (2011). Risk factors for sexual aggression in young men: An expansion of the confluence model. *Aggressive Behavior*, *37*(5), 450-464. doi:10.1002/ab.20399

Abelson, R. P. (1976). A script theory of understanding, attitude, and behavior. In J. Carroll & T. Payne (Eds.), *Cognition and social behavior.* Potomac, MD: Lawrence Erlbaum.

Acock, A. C. (2005). Working with missing values. *Journal of Marriage and Family*, *67*(4), 1012-1028. doi:10.1111/j.1741-3737.2005.00191.x

Adelman, M. B. (1991). Play and incongruity: Framing safe-sex talk. *Health Communication*, *3*(3), 139-155. doi:10.1207/s15327037hc0303_1

Afifi, T., & Afifi, W. (Eds.). (2009). *Uncertainty, information management, and disclosure decisions: Theories and applications*. New York, NY: Routledge.

Afifi, W. A., & Burgoon, J. K. (1998). “We never talk about that”: A comparison of cross-sex friendships and dating relationships on uncertainty and topic avoidance. *Personal Relationships*, *5*(3), 255-272. doi:10.1111/j.1475-6811.1998.tb00171.x

Afifi, W. A., Dillow, M. R., & Morse, C. (2004). Examining predictors and consequences of information seeking in close relationships. *Personal Relationships*, *11*(4), 429-449. doi:10.1111/j.1475-6811.2004.00091.x

Afifi, W. A., Morgan, S. E., Stephenson, M., Morse, C., Harrison, T., Reichert, T., & Long, S. D. (2006). Examining the decision to talk with family about organ donation: Applying the theory of motivated information management. *Communication Monographs, 73*, 188-215. doi:10.1080/03637750600690700

Afifi, W. A., & Morse, C. (2009). Expanding the role of emotion in the theory of motivated information management. In T. Afifi & W. A. Afifi (Eds.) *Uncertainty, information management, and disclosure decisions: Theories and applications* (pp. 87-105). New York, NY: Routledge/Taylor & Francis Group.

Afifi, W. A., & Robbins, S. (2015). Theory of motivated information management: Struggles with uncertainty and its outcomes. In D. O. Braithwaite & P. Schrodt (Eds.), *Engaging theories in interpersonal communication: Multiple perspectives* (2nd ed., pp. 143–156). Thousand Oaks, CA: Sage.

Afifi, W. A., & Weiner, J. L. (2004). Toward a theory of motivated information management. *Communication Theory, 14*, 167-190. doi:10.1111/j.1468-2885.2004.tb00310.x

Afifi, W. A., & Weiner, J. L. (2006). Seeking information about sexual health: Applying the theory of motivated information management. *Human Communication Research*, *32*(1), 35-57. doi:10.1111/j.1468-2958.2006.00002.x

Babrow, A. S. (2001). Uncertainty, value, communication, and problematic integration. *Journal of Communication, 51*, 553-573. doi:10.1111/j.1460-2466.2001.tb02896.x

Banyard, V. L., Plante, E. G., & Moynihan, M. M. (2004). Bystander education: Bringing a broader community perspective to sexual violence prevention. *Journal of Community Psychology*, *32*(1), 61-79. doi: 10.1002/jcop.10078

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182. doi:10.1037/0022-3514.51.6.1173

Bendixen, M. (2014). Evidence of systematic bias in sexual over-and underperception of naturally occurring events: A direct replication of Haselton (2003) in a more gender-equal culture. *Evolutionary Psychology*, *12*(5), 1004-1021. doi:10.1177/147470491401200510

Bensussan, P. (2009). Marital rape according to French law: Desire, need and consent. *Sexologies*, *18*(3), 182-185. doi: 10.1016/j.sexol.2009.04.001

Beres, M. A. (2007). "Spontaneous" sexual consent: An analysis of sexual consent literature. *Feminism & Psychology*, *17*(1), 93–108. doi:10.1177/0959353507072914

Beres, M. A., Herold, E., Maitland, S. B., &. (2004). Sexual consent behaviors in consent behaviors in same-sex relationships. *Archives of Sexual Behavior*, *33*(5), 475-486. doi:10.1023/B:ASEB.0000037428.41757.10

Berger, C. R., & Calabrese, R. J. (1975). Some exploration in initial interactions and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research, 1*, 99-112. doi:10.1111/j.1468-2958.1975.tb00258.x

Blanch-Hartigan, D., Andrzejewski, S. A., & Hill, K. M. (2012). The effectiveness of training to improve person perception accuracy: a meta-analysis. *Basic and Applied Social Psychology*, *34*(6), 483-498. doi: 10.1080/01973533.2012.728122

Brashers, D. E. (2001). Communication and uncertainty management. *Journal of Communication, 51*, 477-497. doi: 10.1111/j.1460-2466.2001.tb02892.x

Brashers, D. E. (2007). A theory of communication and uncertainty management. In B. B. Whaley & Samter (Eds.), *Explaining communication: Contemporary theories and exemplars* (pp. 201-218). Hillsdale, NJ: Lawrence Erlbaum.

Bollen, K. A. (1989). *Structural equations with latent variables*. New York, NY: Wiley.

Buchanan, C. M., Maccoby, E. E., & Dornbusch, S. M. (1991). Caught between parents: Adolescents experience in divorced homes. *Child Development, 62,* 1008-1029. doi: 10.111/j.1467-8624.1991.tb01586.x

Buss, D. M. (2003). *The evolution of desire: Strategies of human mating* (Rev. ed.). New York, NY: Basic Books.

California Senate Bill 967. (2014). De León. Student safety: Sexual assault. Approved by Governor September 28, 2014. Retrieved December 27, 2014, from https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB967.

Catania, J. A. (1998). Dyadic sexual communication scale and dyadic sexual regulation scale. In C. M. Davis, W. L. Yarber, R. Bauserman, G. Schreer, & S. L. Davis (Eds.), *Handbook of sexuality-related measures* (pp. 129-131). Thousand Oaks, CA: Sage.

Caughlin, J. P., and Scott, A. M. (2010). Toward a communication theory of demand/withdraw pattern of interaction in interpersonal relationships. In S. Smith & R. Wilson (Eds.), *New directions in interpersonal communication* (pp. 180-200). Thousand Oaks, CA: Sage.

Cecil, H., & Pinkerton, S. D. (1998). Reliability and validity of a self-efficacy instrument for protective sexual behaviors. *Journal of American College Health*, *47*(3), 113-121. doi: 10.1080/07448489809595631

Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, *58*(6), 1015-1026. doi: 10.1037/0022-3514.58.6.1015

Cohen, S., Schulz, M. S., Liu, S. R., Halassa, M., & Waldinger, R. J. (2014). Empathic accuracy and aggression in couples: Individual and dyadic links. *Journal of Marriage and Family*. *77*(3), 697-711. doi:10.1111/jomf.12184

Cook, W. L., & Kenny, D. A. (2005). The actor–partner interdependence model: A model of bidirectional effects in developmental studies. *International Journal of Behavioral Development*, *29*(2), 101-109. doi:10.1080/01650250444000405

Cunningham, S. D., Tschann, J., Gurvey, J. E., Fortenberry, J. D., & Ellen, J. M. (2002). Attitudes about sexual disclosure and perceptions of stigma and shame. *Sexually Transmitted Infections*, *78*(5), 334-338. doi:10.1136/sti.78.5.334

Cupach, W. R., & Metts, S. (1991). Sexuality and communication in close relationships. In K. McKinney & S. Sprecher (Eds.), *Sexuality in close relationships*. Hillsdale, NJ: Lawrence Erlbaum.

Cuperman, R., Howland, M., Ickes, W., & Simpson, J. A. (2011). Motivated inaccuracy: Past and future directions. In J. L. Smith, W. Ickes, J. Hall, & S. Hodges (Eds.), *Managing interpersonal sensitivity: Knowing when-and when not-to understand others* (pp. 215–233). Hauppauge, NY: Nova Science.

Daigle, L. E., Fisher, B. S., & Cullen, F. T. (2008). The Violent and Sexual Victimization of College Women Is Repeat Victimization a Problem? *Journal of Interpersonal Violence*, *23*(9), 1296-1313. doi:10.1177/0886260508314293

Dalal, D. K., & Zickar, M. J. (2012). Some common myths about centering predictor variables in moderated multiple regression and polynomial regression. *Organizational Research Methods*, *15*(3), 339-362. doi:10.1177/1094428111430540

Denes, A. (2011). Biology as consent: Problematizing the scientific approach to seducing women's bodies. *Women's Studies International Forum*, *34*(5), 411–419. doi:10.1016/j.wsif.2011.05.002

Denes, A., & Afifi, T. D. (2014). Pillow talk and cognitive decision-making processes: Exploring the influence of orgasm and alcohol on communication after sexual activity. *Communication Monographs*, *81*(3), 333-358. doi:10.1080/03637751.2014.926377

Donat, P. L., & White, J. W. (2000). Re-examining the issue of nonconsent in acquaintance rape. In C. B. Travis & J. W. White (Eds.), *Sexuality, society, and feminism* (pp. 355-376). Washington, DC: American Psychological Association.

Dorio, C., Parsons, M., Lehr, S., Adame, D., & Carlone, J. (1992). Measurement of safe sex behavior in adolescents and young adults. *Nursing Research*, *41*(4), 203-209.

Dunbar, N. E., & Abra, G. (2010). Observations of dyadic power in interpersonal interaction. *Communication Monographs*, *77*(4), 657-684. doi:10.1080/03637751.2010.520018

Edgar, T., & Fitzpatrick, M. A. (1993). Expectations for sexual interaction: A cognitive test of the sequencing of sexual communication behaviors. *Health Communication*, *5*(4), 239-261. doi:10.1207/s15327027hc0504_1

Edmondson, C. B., & Conger, J. C. (1995). The impact of mode of presentation on gender differences in social perception. *Sex Roles*, *32*(3-4), 169-183. doi:10.1007/BF01544787

Farris, C., Treat, T. A., Viken, R. J., & McFall, R. M. (2008). Sexual coercion and the misperception of sexual intent. *Clinical Psychology Review*, *28*(1), 48-66. doi: 10.1016/j.cpr.2007.03.002

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. doi:10.1177/1049732309354274

Fedina, L., Holmes, J. L., & Backes, B. L. (2016). Campus sexual assault a systematic review of prevalence research from 2000 to 2015. *Trauma, Violence, and Abuse*. Advance online publication. doi:10.1177/1524838016631129

Feltey, K. M., Ainslie, J. J., & Geib, A. (1991). Sexual coercion attitudes among high school students: The influence of gender and rape education. *Youth and Society*, *23*(2), 229-250. doi:10.1177/0044118X91023002004

Finucane, M., & Holup, J. (2006). Risk as value: combining affect and analysis in risk judgments. *Journal of Risk Research*, *9*(2), 141–164. doi: 10.1080/13669870500166930

Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York, NY: McGraw-Hill.

Fowler, C., & Afifi, W. A. (2011). Applying the theory of motivated information management to adult children's discussions of caregiving with aging parents. *Journal of Social and Personal Relationships, 28*, 507-535. doi: 10.1177/0265407510384896

Fowler, C., Gasiorek, J., & Afifi, W. (2016). Complex considerations in couples' financial information management: Extending the Theory of Motivated Information Management. *Communication Research*. Advance Online. doi: 10.1177/0093650216644024

Gagnon, J. H., & Simon, W. (1973). *Sexual conduct: The social sources of human sexuality*, Chicago, IL: Aldine Transaction.

Gagnon, J. H. (1990). The explicit and implicit use of the scripting perspective in sex research. *Annual Review of Sex Research*, *1*(1), 1-43. doi:10.1080/10532528.1990.10559854

Gagnon, J. H. (1999). Sexual conduct: as today's memory serves. *Sexualities*, *2*(1), 115-126. doi: doi:10.1177/136346099002001007

Gaucher, D., Wood, J. V., Stinson, D. A., Forest, A. L., Holmes, J. G., & Logel, C. (2012). Perceived regard explains self-esteem differences in expressivity. *Personality and Social Psychology Bulletin*, *38*(9), 1144-1156. doi:10.1177/0146167212445790

Gavin, J. (2000). Arousing suspicion and violating trust: The lived ideology of safe sex talk. *Culture, Health and Sexuality*, *2*(2), 117-134. doi:10.1080/136910500300750

Gigerenzer, G., & Gaissmaier, W. (2011). Heuristic decision making. *Annual Review of Psychology*, *62*, 451–82. doi:10.1146/annurev-psych-120709-145346

Giles, H. (Ed.). (2016). Communication accommodation theory: Negotiating personal relationships and social identities across contexts. Cambridge, UK: Cambridge University Press.

Gleason, K. A., Jensen-Campbell, L. A., & Ickes, W. (2009). The role of empathic accuracy in adolescents' peer relations and adjustment. *Personality and Social Psychology Bulletin*, *35*(8), 997-1011. doi:10.1177/0146167209336605

Goffman, E. (1955). On face-work: An analysis of ritual elements in social interaction. *Psychiatry*, *18*(3), 213-231.

Gomillion, S., Lamarche, V. M., Murray, S. L., & Harris, B. (2014). Protected by your self-control: The influence of partners' self-control on actors' responses to interpersonal risk. *Social Psychological and Personality Science*, *5*(8), 873–882. doi:10.1177/1948550614538462

Ford, C. S., & Beach, F. (1951). *Patterns of sexual behavior*. New York: Harper and Row

Hall, D. S. (1995). *Consent for sexual behavior in a college student population*. (Unpublished doctoral dissertation). The Institute for Advanced Study of Human Sexuality: San Francisco, CA.

Hall, J. A., & Bernieri, F. J. (Eds.). (2001). *Interpersonal sensitivity: Theory and measurement*. Mahwah, NJ: Lawrence Erlbaum.

Hall, J. A., Andrzejewski, S. A., & Yopchick, J. E. (2009). Psychosocial correlates of interpersonal sensitivity: A meta-analysis. *Journal of Nonverbal Behavior*, *33*(3), 149-180. doi:10.1007/s10919-009-0070-5

Haselton, M. G. (2003). The sexual overperception bias: Evidence of a systematic bias in men from a survey of naturally occurring events. *Journal of Research in Personality*, *37*(1), 34-47. doi:10.1080/136910500300750

Haselton, M. G., & Buss, D. M. (2000). Error management theory: A new perspective on biases in cross-sex mind reading. *Journal of Personality and Social Psychology, 78*, 81-91. doi:10.1037/0022-3514.78.1.81

Haselton, M., & Galperin, A. (2012). Error management and the evolution of cognitive bias. In J. P. Forgas, K. Fiedler, & C. Sedikides *Social thinking and interpersonal behavior* (45–63). New York, NY: Psychology Press.

Haselton, M. G., & Nettle, D. (2006). The paranoid optimist: An integrative evolutionary model of cognitive biases. *Personality and Social Psychology Review*, *10*(1), 47-66. doi:10.1207/s15327957pspr1001_3

Henningsen, D. D. (2004). Flirting with meaning: An examination of miscommunication in flirting interactions. *Sex Roles*, *50*(7-8), 481-489. doi:10.1023/B:SERS.0000023068.49352.4b

Henningsen, D. D., & Henningsen, M. L. M. (2010). Testing error management theory: Exploring the commitment skepticism bias and the sexual overperception bias. *Human Communication Research*, *36*(4), 618-634. doi:10.1111/j.1468-2958.2010.01391.x

Henningsen, D. D., Kartch, F., Orr, N., & Brown, A. (2009). The perceptions of verbal and nonverbal flirting cues in cross-sex interactions. *Human Communication*, *12*(4), 371-381.

Hickman, S. E., & Muehlenhard, C. L. (1999). "By the semi-mystical appearance of a condom": How young women and men communicate sexual consent in heterosexual situations. *Journal of Sex Research*, *36*(3), 258–272. doi:10.1080/00224499909551996

Higgins, L. T., Zheng, M., Liu, Y., & Sun, C. H. (2002). Attitudes to marriage and sexual behaviors: A survey of gender and culture differences in China and United Kingdom. *Sex Roles*, *46*(3-4), 75-89. doi: 10.1023/A:1016565426011

Hodges, S. D., Klaaren, K. J., & Wheatley, T. (2000). Talking about safe sex: The role of expectations and experience. *Journal of Applied Social Psychology*, *30*(2), 330-349. doi:10.1111/j.1559-1816.2000.tb02319.x

Holbert, R. L., & Stephenson, M. T. (2002). Structural equation modeling in the communication sciences, 1995–2000. *Human Communication Research*, *28*(4), 531-551. doi:10.1111/j.1468-2958.2002.tb00822.x

Horan, S. M., & Booth-Butterfield, M. (2013). Understanding the routine expression of deceptive affection in romantic relationships. *Communication Quarterly*, *61*(2), 195-216. doi: 10.1080/01463373.2012.751435

Howland, M., & Rafaeli, E. (2010). Bringing everyday mind reading into everyday life: Assessing empathic accuracy with daily diary data. *Journal of Personality*, *78*(5), 1437-1468. doi: 10.1111/j.1467-6494.2010.00657.x

Humphreys, Q. T. P. (2000). *Sexual consent in heterosexual dating relationships: Attitudes and behaviors of university students* (Unpublished dissertation). The University of Guelph: Guelph, Canada.

Huston, T. L., McHale, S. M., & Crouter, A. C. (1986). When the honeymoon's over: Changes in the marriage relationship over the first year. In R. Gilmour & S. Duck (Eds.), *The emerging field of personal relationships* (pp. 109-132). Hillsdale, NJ: Lawrence Erlbaum.

Ickes, W. (1993). Empathic accuracy. *Journal of Personality*, *61*(4), 587-610. doi:10.1111/j.1467-6494.1993.tb00783.x

Ickes W. (2003). *Everyday mind reading*. New York, NY: Perseus Press.

Ickes, W. (2011). Everyday mind reading is driven by motives and goals. *Psychological Inquiry*, *22*(3), 200-206. doi**:**10.1080/1047840X.2011.561133

Ickes, W., & Hodges, S. (2013). Empathic accuracy in close relationships. In J. A. Simpson & L. Campbell (Eds.), *Handbook of close relationships* (pp. 348-373). London, UK: Oxford University Press.

Ickes, W. & Simpson, J. A. (2001). Motivational aspects of empathic accuracy. In G. J. O. Fletcher & M. Clark (Eds.), *The Blackwell handbook of social psychology: Interpersonal processes* (pp. 229-249). Malden, MA: Blackwell.

Ickes, W., & Simpson, J. A. (1997). Managing empathic accuracy in close relationships. In W. Ickes (Ed.), *Empathic accuracy* (pp. 218–250). New York, NY: Guilford Press.

Ickes, W., Dugosh, J. W., Simpson, J. A., & Wilson, C. L. (2003). Suspicious minds: The motivation to acquire relationship-threatening information. *Personal Relationships, 10*, 131-148. doi:10.1111/1475-6811.00042

Ickes, W., Gesn, P. R., & Graham, T. (2000). Gender differences in empathic accuracy: Differential ability or differential motivation? *Personal Relationships*, *7*(1), 95-109. doi:10.1111/j.1475-6811.2000.tb00006.x

Ickes, W., Stinson, L., Bissonnette, V., & Garcia, S. (1990). Naturalistic social cognition: Empathic accuracy in mixed-sex dyads. *Journal of Personality and Social Psychology*, *59*(4), 730-742. doi:10.1037/0022-3514.59.4.730

Impett, E. A., & Peplau, L. A. (2002). Why some women consent to unwanted sex with a dating partner: Insights from attachment theory. *Psychology of Women Quarterly*, *26*(4), 360-370. doi:10.1111/1471-6402.t01-1-00075

Izard, C. E., Libero, D. Z., Putnam, P., & Haynes, O. M. (1993). Stability of emotion experiences and their relations to traits of personality. *Journal of Personality and Social Psychology, 64,* 847-860. doi:10.1037/0022-3514.64.5.847

Jang, S. A., & Tian, Y. (2012). The effects of communication efficacy on information-seeking following events that increase uncertainty: A cross-lagged panel analysis. *Communication Quarterly*, *60*(2), 234-254. doi:10.1080/01463373.2012.669325

Joffe, H. (2003). Risk: from perception to social representation. *British Journal of Social Psychology*, *42*, 55–73. doi:10.1348/014466603763276126

Johnson, D. D. P., Blumstein, D. T., Fowler, J. H., & Haselton, M. G. (2013). The evolution of error: error management, cognitive constraints, and adaptive decision-making biases. *Trends in Ecology and Evolution*, *28*(8), 474–81. doi: 10.1016/j.tree.2013.05.014

Jozkowski, K. N. (2011). Measuring internal and external conceptualizations of sexual consent: A mixed-methods exploration of sexual consent. *ProQuest Dissertations and*

Theses, (June), 323. Retrieved from http://search.proquest.com/docview/884637353?accountid=14553\nhttp://openurl.library.uiuc.edu/sfxlcl3?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+&+theses&sid=ProQ:Dissertations+&+Theses+@+CIC+Institutions&atitle=

Jozkowski, K. N. (2015). "Yes means yes"? Sexual consent policy and college students. *Change: The Magazine of Higher Learning*, *47*(2), 16-23. doi:10.1080/00091383.2015.1004990

Jozkowski, K. N., Sanders, S., Peterson, Z. D., Dennis, B., & Reece, M. (2014). Consenting to sexual activity: The development and psychometric assessment of dual measures of consent. *Archives of Sexual Behavior*, *43*(3), 437–450. doi:10.1007/s10508-013-0225-7

Kalichman, S. C., & Nachimson, D. (1999). Self-efficacy and disclosure of HIV-positive serostatus to sex partners. *Health Psychology*, *18*(3), 281-287. doi:10.1037/0278-6133.18.3.281

Karney, B. R., Hops, H., Redding, C. A., Reis, H. T., Rothman, A. J., & Simpson, J. A. (2010). A framework for incorporating dyads in models of HIV-prevention. *AIDS and Behavior*, *14*(2), 189-203. doi:10.1007/s10461-010-9802-0

Katz, J., & Tirone, V. (2009). Women's sexual compliance with male dating partners: Associations with investment in ideal womanhood and romantic well-being. *Sex Roles*, *60*(5-6), 347-356. doi: 10.1007/s11199-008-9566-4

Kenny, D. A. (1996). Models of non-independence in dyadic research. *Journal of Social and Personal Relationships*, *13*(2), 279-294. doi: 10.1177/0265407596132007

Kenny, D. A., & Acitelli, L. K. (2001). Accuracy and bias in the perception of the partner in a close relationship. *Journal of Personality and Social Psychology*, *80*, 439-448. doi:10.1037/0022-3514.80.3.439

Kenny, D.A., Kashy, D.A., & Bolger, N. (1998). Data analysis in social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 233–265). New York, NY: Oxford University Press.

Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York, NY: Guilford Press.

Kilpatrick, S. D., Bissonnette, V. L., & Rusbult, C. E. (2002). Empathic accuracy and accommodative behavior among newly married couples. *Personal Relationships*, *9*(4), 369-393. doi: 10.1111/1475-6811.09402

Kim, J. L., Sorsoli, C. L., Collins, K., Zylbergold, B. A., Schooler, D., & Tolman, D. L. (2007). From sex to sexuality: Exposing the heterosexual script on primetime network television. *Journal of Sex Research*, *44*, 145–157. doi:10.1080/00224490701263660

Klement, K. R., Sagarin, B. J., & Lee, E. M. (2016). Participating in a culture of consent may be associated with lower rape-supportive beliefs. *The Journal of Sex Research*, 1-5. doi: 10.1080/00224499.2016.1168353

Kline, R. B. (2011). *Principles and practice of structural equation modeling.* (3rd Ed.). New York, NY: Guilford Press.

Knobloch, L. K., & Solomon, D. H. (2002). Information seeking beyond initial interaction: Negotiating relational uncertainty within close relationships. *Human Communication Research*, *28*, 243-257. doi:10.1111/j.1468-2958.2002.tb00806.x

Koenig, B. L., Kirkpatrick, L. A., & Ketelaar, T. (2007). Misperception of sexual and romantic interests in opposite-sex friendships: Four hypotheses. *Personal Relationships*, *14*(3), 411–429. doi 10.1111/j.1475-6811.2007.00163.x

Kowalski, R. M. (1992). Nonverbal behaviors and perceptions of sexual intentions: Effects of sexual connotativeness, verbal response, and rape outcome. *Basic and Applied Social Psychology*, *13*(4), 427–445. doi:10.1207/s15324834basp1304_4

La France, B. (2010). What verbal and nonverbal communication cues lead to sex? An analysis of the traditional sexual script. *Communication Quarterly*, *58*(3), 297–318. doi: 10.1080/01463373.2010.503161

La France, B. H., Henningsen, D. D., Oates, A., & Shaw, C. M. (2009). Social–sexual interactions? Meta-analyses of sex differences in perceptions of flirtatiousness, seductiveness, and promiscuousness. *Communication Monographs*, *76*(3), 263-285. doi: 10.1080/03637750903074701

Lawrance, K. A., Byers, E. S., & Cohen, J. (1998). Interpersonal exchange model of sexual satisfaction questionnaire. C.M. Davis, W.L. Yarber, R. Bauserman, G. Schreer & S.L. Davis (Eds.) *Sexuality-related measures: A compendium*, (2nd ed., pp. 514-519). Thousand Oaks, CA: Sage.

Lenton, A. P., & Bryan, A. (2005). An affair to remember: The role of sexual scripts in perceptions of sexual intent. *Personal Relationships*, *12*(4), 483-498. doi:10.1111/j.1475-6811.2005.00127.x

Levesque, M. J., Nave, C. S., & Lowe, C. A. (2006). Toward an understanding of gender differences in inferring sexual interest. *Psychology of Women Quarterly*, *30*(2), 150-158. doi: 10.1111/j.1471-6402.2006.00278.x

Lindgren, K. P., Schacht, R. L., Pantalone, D. W., & Blayney, J. A. (2009). Sexual communication, sexual goals, and students' transition to college: Implications for sexual assault, decision-making, and risky behaviors. *Journal of College Student Development*, *50*(5), 491-503. doi: 10.1353/csd.0.0095

Lisak, D., & Miller, P. M. (2002). Repeat rape and multiple offending among undetected rapists. *Violence and Victims*, *17*(1), 73-84. doi:10.1891/vivi.17.1.73.33638

Little, R. J. A., & Rubin, D. B. (1989). The analysis of social science data with missing values. *Sociological Methods and Research*, *18*, 292-326. doi:10.1177/0049124189018002004

Littleton, H. L., Axsom, D., & Yoder, M. (2006). Priming of consensual and nonconsensual sexual scripts: An experimental test of the role of scripts in rape attributions. *Sex Roles*, *54*, 557–563. doi:10.1007/s11199-006-9017-z

Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. *Psychological Bulletin*, *127*(2), 267–286. doi:10.1037/0033-2909.127.2.267

MacKinnon, D. P., Lockwood, C. M., Lockwood, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, *7*(1), 83–104. doi: 10.1037/1082-989X.7.1.83

MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, *51*(1), 201-226.

Malloy, T. E., & Albright, L. (2001). Multiple and single interaction dyadic research designs: Conceptual and analytic issues. *Basic and Applied Social Psychology*, *23*(1), 1-19.

Marangoni, C., Garcia, S., Ickes, W., & Teng, G. (1995). Empathic accuracy in a clinically relevant setting. *Journal of personality and social psychology*, *68*(5), 854-869. doi: 10.1037/0022-3514.68.5.854

Mathieu, N. C. (1985). Quand céder n'est pas consentir. In N. C. Mathieu (Ed.), *L'arraisonnement des femmes: essais en anthropologie des sexes* (pp.169-245). Paris: Éditions de l'École des Hautes Études en Sciences Sociales.

McLaren, R. M. and Pederson, J. R. (2014). Relational communication and understanding in conversations about hurtful events between parents and adolescents. *Journal of Communication*, *64*, 145–166. doi:10.1111/jcom.12072

McClure, E. B., & Nowicki Jr., S. (2001). Associations between social anxiety and nonverbal processing skill in preadolescent boys and girls. *Journal of Nonverbal Behavior*, *25*(1), 3-19. doi:10.1023/A:1006753006870

McComas, K. a. (2006). Defining moments in risk communication research: 1996-2005. *Journal of Health Communication*, *11*(1), 75–91. doi:10.1080/10810730500461091

McDavitt, B., & Mutchler, M. G. (2014). "Dude, you're such a slut!" Barriers and facilitators of sexual communication among young gay men and their best friends. *Journal of Adolescent Research*, *29*(4), 464-498. doi:10.1177/0743558414528974

McMahon, S., & Farmer, G. L. (2011). An updated measure for assessing subtle rape myths. *Social Work Research, 35*(2), 71-81. doi:10.1093/swr/35.2.71

Metts, S., & Spitzberg, B. H. (1996). Sexual communication in interpersonal contexts: A script-based approach. In B. R. Burleson (Ed.), *Communication Yearbook* (pp. 49-91). Thousand Oaks, CA: Sage.

Miller-Ott, A. E., & Linder, A. (2013). Romantic Partners' Use of Facework and Humor to Communicate About Sex. *Qualitative Research Reports in Communication*, *14*(1), 69-78. doi:10.1080/17459435.2013.835344

Morse, C. R., Volkman, J. E., Samter, W., Trunzo, J., McClure, K., Kohn, C., & Logue, J. C. (2013). The influence of uncertainty and social support on information seeking concerning illicit stimulant use among young adults. *Health Communication*, *28*(4), 366-377. doi:10.1080/10410236.2012.689095

Mortimer, D. C. (1996). "*Reading"ourselves "reading" others: Actual versus self-estimated empathic accuracy***.** Unpublished master's thesis, University of Texas at Arlington.

Morton, T. A., & Duck, J. M. (2001). Communication and health beliefs: Mass and interpersonal influences on perceptions of risk to self and others. *Communication Research*, *28*(5), 602–626. doi:10.1177/009365001028005002.

Muehlenhard, C. L. (1996). The complexities of sexual consent. *SIECUS Report*, *24* (2), 4-7.

Muehlenhard, C. L., & Felts, A. S. (1998). Sexual beliefs scale. In C. M. Davis, W. L. Yarker, R. Bauserman, G. Shreer, & S. L. Davis (Eds.), *Handbook of sexuality-related measures* (pp. 116-118). Newbury Park, CA: Sage.

Muise, A., Giang, E., & Impett, E. A. (2014). Post sex affectionate exchanges promote sexual and relationship satisfaction. *Archives of Sexual Behavior*, *43*(7), 1391-1402. doi:10.1007/s10508-014-0305-3

Ohs, J. E. (2008). *Health-care decision making at the latter end of the lifespan*. (Unpublished doctoral dissertation). Pennsylvania State University: University Park, PA.

O'Sullivan, L. F., & Allgeier, E. R. (1998). Feigning sexual desire: Consenting to unwanted sexual activity in heterosexual dating relationships. *Journal of Sex Research*, *35*(3), 234-243. doi: 0.1080/00224499809551938

Peterson, Z. D., & Muehlenhard, C. L. (2007). Conceptualizing the "wantedness" of women's consensual and nonconsensual sexual experiences: Implications for how women label their experiences with rape. *Journal of Sex Research*, *44*(1), 72-88. Doi: 10.1080/00224490709336794

Peugh, J. L., DiLillo, D., & Panuzio, J. (2013). Analyzing mixed-dyadic data using structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, *20*(2), 314-337. doi: 10.1080/10705511.2013.769395

Perilloux, C., Easton, J. A., & Buss, D. M. (2012). The misperception of sexual interest. *Psychological Science*, *23*(2),146-151. doi:10.1177/0956797611424162

Porter, S. R., Whitcomb, M. E., & Weitzer, W. H. (2004). Multiple surveys of students and survey fatigue. *New Directions for Institutional Research*, *121*, 63-73. doi: 10.1002/ir.101

Potocki, B. L. (2012). *Preventing sexual assault: Applying the theory of motivated information management*. (Unpublished Master's thesis). Ohio State University: Columbus, OH.

Rauscher, E. A., & Hesse, C. (2014). Investigating uncertainty and emotions in conversations about family health history: A test of the theory of motivated information management. *Journal of Health Communication*, *19*(8), 939-954. doi:10.1080/10810730.2013.837558

Roggensack, K. E., & Sillars, A. (2014). Agreement and understanding about honesty and deception rules in romantic relationships. *Journal of Social and Personal Relationships*, *31*(2), 178-199. doi:10.1177/0265407513489914

Ryan, K. M. (1988). Rape and seduction scripts. *Psychology of Women Quarterly*, *12*, 237–245.

Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, *99*(6), 323-338. doi: 10.3200/JOER.99.6.323-338

Sillars, A. (2011). Motivated misunderstanding in family conflict discussions. In J. L. Smith, W. Ickes, J. Hall, & S. Hodges (Eds.), *Managing interpersonal sensitivity: Knowing when-and when not-to understand others* (pp. 193-213). Hauppauge, NY: Nova Science.

Sillars, A. L. (1985). Interpersonal perception in relationships. In W. J. Ickes (Ed.), *Compatible and incompatible relationships* (pp. 277-305). New York, NY: Springer-Verlag.

Sillars, A., Koerner, A., & Fitzpatrick, M. A. (2005). Communication and understanding in parent-adolescent relationships. *Human Communication Research*, *31*(1), 102-128. doi: 10.1111/j.1468-2958.2005.tb00866.x

Sillars, A. L., & Scott, M. D. (1983). Interpersonal perception between intimates: An integrative review. *Human Communication Research*, *10*(1), 153-176. doi:10.1111/j.1468-2958.1983.tb00009.x

Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of Sexual Behavior*, *15*(2), 97-120. doi:10.1007/BF01542219

Simpson, J. A., Ickes, W., & Blackstone, T. (1995). When the head protects the heart: Empathic accuracy in dating relationships. *Journal of Personality and Social Psychology*, *69*(4), 629-641. doi:10.1037/0022-3514.69.4.629

Simpson, J. A., Oriña, M. M., & Ickes, W. (2003). When accuracy hurts, and when it helps: a test of the empathic accuracy model in marital interactions. *Journal of Personality and Social Psychology*, *85*(5), 881-893. doi: 10.1037/0022-3514.85.5.881

Sinozich, S., & Langton, L. (2014, December). *Rape and sexual assault victimization among college-age females, 1995-2013*. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.

Stephenson, M. T., & Holbert, R. L. (2003). A Monte Carlo simulation of observable versus latent variable structural equation modeling techniques. *Communication Research*, *30*(3), 332-354. doi: 10.1177/0093650203030003004

Stoner, B. P., Whittington, W. L. H., Aral, S. O., Hughes, J. P., Handsfield, H. H., & Holmes, K. K. (2003). Avoiding risky sex partners: perception of partners' risks versus partners' self reported risks. *Sexually Transmitted Infections*, *79*(3), 197-201. doi:10.1136/sti.79.3.197

Swann Jr., W. B., & Gill, M. J. (1997). Confidence and accuracy in person perception: Do we know what we think we know about our relationship partners? *Journal of Personality and Social Psychology*, *73*, 747-757. doi:10.1037/0022-3514.73.4.747

Tabachnik, B. G., & Fidell, L. S. (2000). *Using multivariate statistics* (4th ed.). Boston: Allyn & Bacon.

Thomas, G., & Fletcher, G. J. (2003). Mind-reading accuracy in intimate relationships: assessing the roles of the relationship, the target, and the judge. *Journal of*

Personality and Social Psychology, *85*(6), 1079-1094. doi: 10.1037/0022-3514.85.6.1079

Treat, T. A., Viken, R. J., Kruschke, J. K., & McFall, R. M. (2010). Role of attention, memory, and covariation-detection processes in clinically significant eating-disorder symptoms. *Journal of Mathematical Psychology*, *54*(1), 184-195. doi:10.1016/j.jmp.2008.11.003

Troth, A., & Peterson, C. C. (2000). Factors predicting safe-sex talk and condom use in early sexual relationships. *Health Communication*, *12*(2), 195-218. doi:10.1207/S15327027HC1202_5

Verhofstadt, L. L., Buysse, A., Ickes, W., Davis, M., & Devoldre, I. (2008). Support provision in marriage: the role of emotional similarity and empathic accuracy. *Emotion*, *8*(6), 792-802. doi: 10.1037/a0013976

Vrij, A., & Kirby, E. (2002). Sex differences in interpreting male-female dyad interactions: Males' predominance in perceiving sexual intent. *International Review of Victimology*, *9*(3), 289-297. doi:10.1177/026975800200900304

Wachinger, G., Renn, O., Begg, C., & Kuhlicke, C. (2013). The risk perception paradox - implications for governance and communication of natural hazards. *Risk Analysis*, *33*(6), 1049–65. doi:10.1111/j.1539-6924.2012.01942.x

Walker, S. J. (1997). When “no” becomes “yes”: Why girls and women consent to unwanted sex. *Applied and Preventive Psychology*, *6*(3), 157-166. doi:10.1016/S0962-1849(97)80003-0

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063-1070. doi:10.1037/0022-3514.54.6.1063

Whitney, P., Rinehart, C. a, & Hinson, J. M. (2008). Framing effects under cognitive load: the role of working memory in risky decisions. *Psychonomic Bulletin and Review*, *15*(6), 1179-1184. doi:10.3758/PBR.15.6.1179

Widman, L., Welsh, D. P., McNulty, J. K., & Little, K. C. (2006). Sexual communication and contraceptive use in adolescent dating couples. *Journal of Adolescent Health*, *39*(6), 893-899. doi:10.1016/j.jadohealth.2006.06.003

Widmer, E. D., Treas, J., & Newcomb, R. (1998). Attitudes toward nonmarital sex in 24 countries. *Journal of Sex Research*, *35*(4), 349-358. doi: 10.1080/00224499809551953

Winslett, A. H., & Gross, A. M. (2008). Sexual boundaries: an examination of the importance of talking before touching. *Violence against Women*, *14*(5), 542–62. doi:10.1177/1077801208315527

Zaki, J., & Ochsner, K. (2011). On the reintegration of accuracy in social cognition research: Let us count the ways. *Psychological Inquiry, 22*, 159-182. doi:10.1080/1047840X.2011.551743

Appendices

Table 1

Descriptive Statistics for Consent Items

Item	Variable	M	SD
To what extent do you feel that you both made affirmative, unambiguous decision to engage in mutually-agreed upon sexual activity? (*not what happened: exactly what happened)*	Affirmative Mutual Consent Perception	6.22	1.51
Everything that happened in this sexual episode was something I wanted to happen (*not what happened: exactly what happened)*	Wanted Sexual Activity	6.51	.73
Percentage of sexual activities enthusiastic about participating	Wanted Sexual Activity	96.18	13.11
Percentage of sexual activities unwanted but took part in anyway (*percentage, 0-100%*)	Unwanted Sexual Activity	4.63	16.73
There were sexual activities I participated in despite my preference not to (*percentage, 0-100%*)	Unwanted Sexual Activity	1.95	1.63
How directly asked partner for consent (*very indirectly: very directly*)	Info-Seek Directness	4.68	2.10
Went out of way to avoid discussing consent with my partner	Avoidance	1.88	1.53
Joked or hinted about partner's consent to see what partner would say	Indirect Info-Seek	5.73	1.60
Observed partner's nonverbal behavior to see if he/she consented to sex	Indirect Info-Seek	5.89	1.54
How directly communicated about sexual consent (*very indirectly: very directly*)	Info-Provide Directness	4.69	2.10
I provided either direct or indirect consent to all sexual activities	Info-Provide Consent	6.49	.95
I was an active participant in all sexual activities	Active Participant	6.49	.97
I felt this person was sober enough to answer questions about his/her consent	Target Efficacy Ability	6.18	1.38
I thought this person was capable of giving me information about his/her consent	Target Efficacy Ability	6.17	1.39
I felt like this person would be completely honest about his/her interest or lack thereof	Target Efficacy Honesty	6.28	1.20
I felt like this person would honestly tell me no if he/she wasn't interested	Target Efficacy Honesty	6.16	1.40
In general, I can discern what specific sexual acts my partner consents to (*percentage, 0-100%*)	Empathic Accuracy Confidence	94.66	8.89
In this episode, I knew what specific acts my partner consented to (*percentage, 0-100%*)	Empathic Accuracy Confidence	96.53	8.16
I have the ability to accurately "read" my partner (*percentage, 0-100%*)	Empathic Accuracy Confidence	90.66	11.59
In general, I know what my partner is thinking and feeling (*percentage, 0-100%*)	Empathic Accuracy Confidence	87.65	14.97

Table 2

Correlations and Descriptive Statistics for Predictor and Outcome Variables

	Variables		1	2	3	4	5	6	7	8	9	10	11	12
1	Uncertainty Discrepancy	*r*	-											
2	Anxiety	*r*	.19**	-										
3	Outcome Expectancies	*r*	-.16*	-.29**	-									
4	Comm Efficacy	*r*	-.22**	-.33**	.38**	-								
5	Coping Efficacy	*r*	.07	.17*	-.29**	-.22**	-							
6	Info Seek Directness	*r*	-.12	.09	.03	-.10	-.09	-						
7	Avoidance	*r*	.12	.17*	-.24**	-.10	.25**	-.18*	-					
8	Indirect Info Seek	*r*	-.05	-.08	.21**	.32**	-.20**	-.05	-.13	-				
9	Reluctant Participation	*r*	-.04	-.20**	.24**	.11	-.23**	.16*	-.11	.09	-			
10	Unwanted Sexual Activity	*r*	.09	.05	-.08	-.03	.03	-.11	.01	-.11	-.43**	-		
11	Perceptions of Affirm Consent	*r*	.14	.07	-.21**	-.06	.07	-.16*	.02	-.16*	-.13	.09	-	
12	Rape Myth Acceptance	*r*	.15*	.06	-.25**	-.07	.16*	.06	.18*	-.21**	-.19*	.28**	.18*	-

* $p < 0.05$. ** $p < 0.01$ (two-tailed)

		Perceiver's Meta-Perspective	
		Yes	No
Target's Direct Perspective	Yes	**I** **Perceiver's Perception**: Accurate **Action**: Potentially engage in wanted sex; mutually beneficial	**II** **Perceiver's Perception**: False negative (Type II error) **Action**: Likely not have sex; potential relational consequences (missed opportunity)
	No	**III** **Perceiver's Perception**: False positive (Type I error) **Action**: At risk to engage in unwanted sex	**IV** **Perceiver's Perception**: Accurate **Action**: Likely none

Figure 1. Potential inaccurate perceptions and consequences

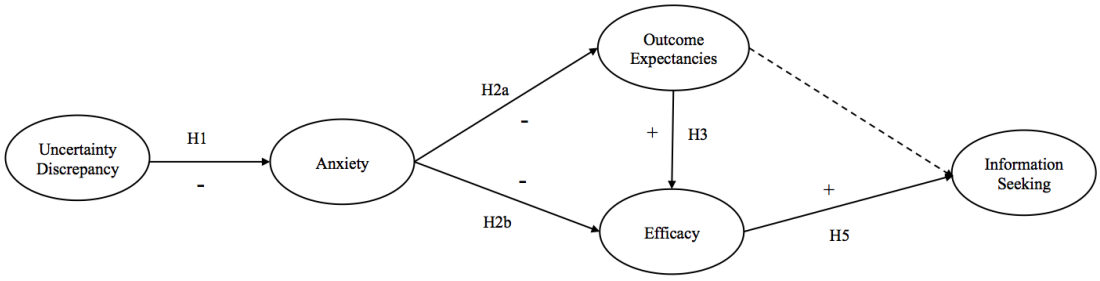

Figure 2. TMIM hypothesized relationships.

Notes: The dashed path reflects a path that is partly mediated by efficacy. The figure is intended as a visual simplification of the theoretical relationships without the inclusion of the dyadic paths.

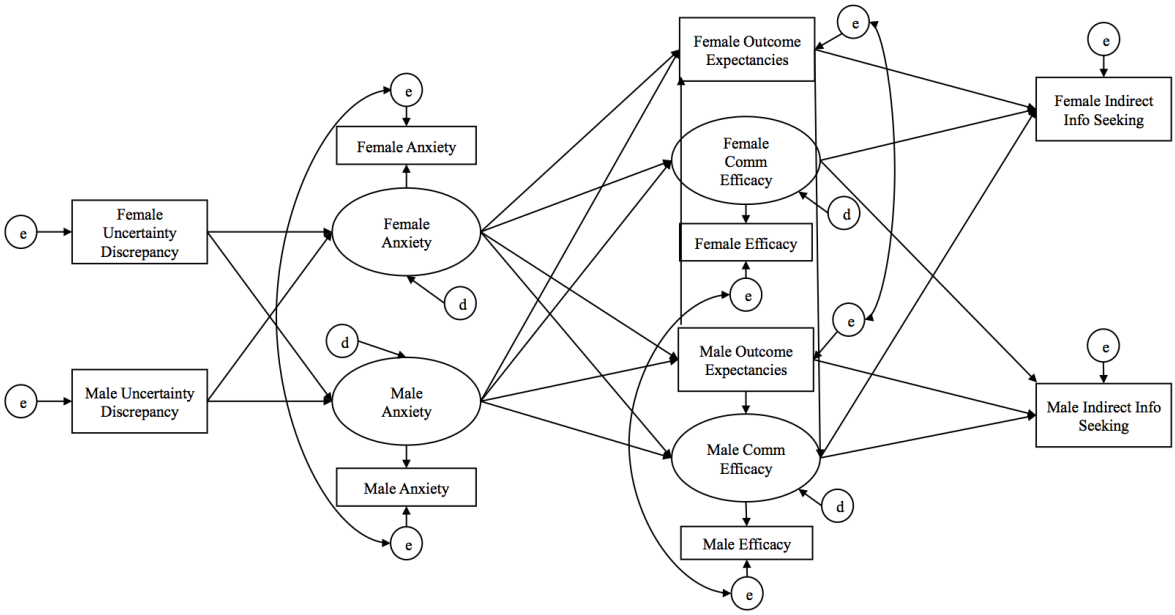

Figure 3. Full hypothesized APIM TMIM model predicting indirect information seeking

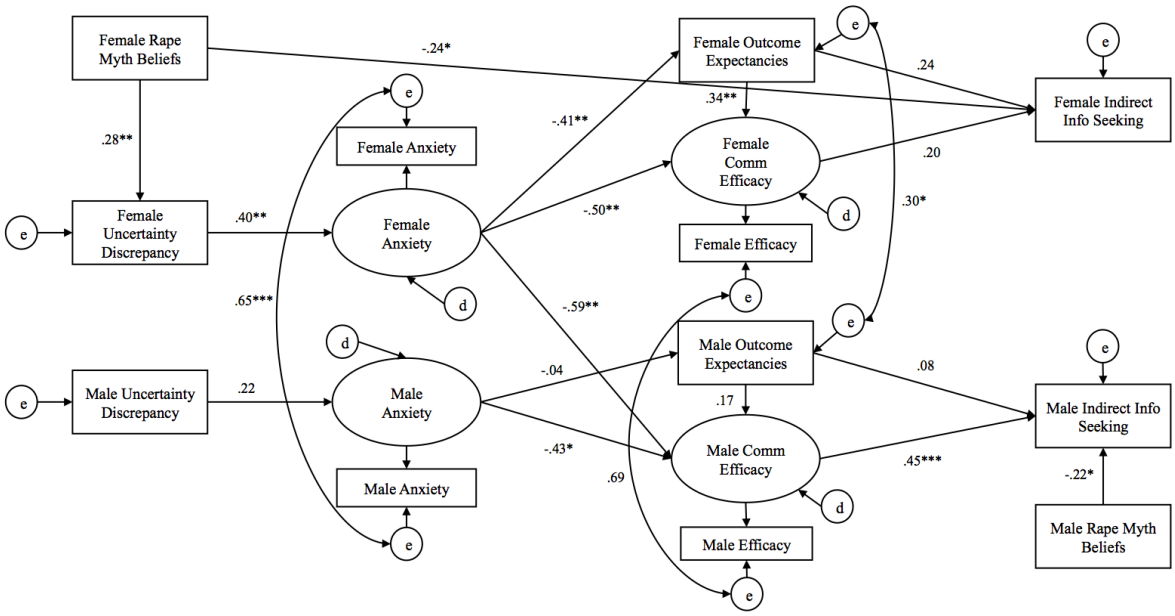

Figure 4. Standardized estimates for final structural model predicting indirect information seeking with rape myth beliefs as a covariate. χ^2 (47, N = 90) = 39.3, p = .78; comparative fit index = 1.00, root mean square error of approximation = .15, 90% CI [.13, .18]. * p < .05, ** p < .01, *** p < .001

Intro

Sexual Experiences Of College Students

PURPOSE:
You are being asked to participate in a research study. The purpose of the study is to understand the sexual experiences of college students. We are interested in what happens before and after a sexual episode.

PROCEDURES:
If you decide to participate, we will survey you on a number of questions related to your sexual activity with one person. In the survey, you will be asked to report on two recent sexual experiences, defined as penetration or anything "below the belt" (such as oral sex or hand stimulation), with one person. You must have been sexually active in this manner with this person for less than 3 months (but not necessarily in a committed relationship). The partner you are reporting on will also be completing a separate survey.

Participation involves you and your partner independently completing one survey that will take approximately 45 minutes. We ask that you do not discuss the survey with your partner until both of you have completed the survey. You will be asked a number of questions about your sexual activity, your feelings, and your relationship with that other person.

We will also contact you by email 1-2 months after your participation to let you know about a follow up study that is related to the first study. This study is a survey that will ask you questions about your sexual activity and about your relationship with the person you reported on in the first study. Your participation in the follow-up study (or lack thereof) will not affect credit you may receive for participating in the main study.

RISKS:
There is a risk that you may feel uncomfortable answering some of the questions, or that they may bring up negative feelings for you. You can skip any questions you do not wish to answer.

BENEFITS:
There is no direct benefit to you anticipated from your participation in this study. However, findings from this research will help researchers better understand sexual behaviors, which may be used to develop interventions that can help people in the future.

CONFIDENTIALITY:
The data we collect will not be linked to your identity in any way. In both studies, the surveys do not collect your IP address, nor are the studies linked to your email or name. Should you choose to participate in the follow-up study, your surveys will be linked together only by a unique code that you will create in the first study.

COSTS/PAYMENT:
The participant who signed up through SONA will receive course credit (1 credit total) for participation. If you are the partner of the SONA participant, you will not receive payment or credit for your participation. If you skip any questions, the SONA participant will still be awarded the full credit for your participation.

RIGHT TO REFUSE OR WITHDRAW:
You may refuse to participate and still receive any benefits you would receive if you were not in the study. You may change your mind about being in the study and quit after the study has started.

QUESTIONS:

If you have any questions about this research project or if you think you may have been injured as a result of your participation, please contact:

Katlyn Gangi (Principal Investigator), Doctoral Candidate, UCSB Department of Communication
katlyn@umail.ucsb.edu
4008 Social Science and Media Studies Building
University of California, Santa Barbara
93106-4020

If you have any questions regarding your rights and participation as a research subject, please contact the Human Subjects Committee at (805) 893-3807 or hsc@research.ucsb.edu. Or write to the University of California, Human Subjects Committee, Office of Research, Santa Barbara, CA 93106-2050

Please indicate if you wish to participate in the study:

I have read the above information and I agree to participate in the study.

I have read the above information and I do not wish to participate in the study.

Thank you in advance for your participation in the survey. Before we begin, we want to assure you that there is no way to connect this survey to your name. The system itself, Qualtrics, (not the researchers) will recognize when the surveys are complete and you will be granted automatic credit through SONA. We hope this assures you that you can be as honest as possible.

First, we'd like to create your own unique six-digit code. This code will allow us to link your survey to your partner's for analysis. At the end of the survey, we will ask you to send the link provided to your partner, and he/she will use the same code that you created.

Please use your FIRST and LAST initials, then the two-digit MONTH and DAY of your birthday.

For example, if your name was Sam Jones and your birthday was January 5th, your code would be SJ0105. You will provide this code to your partner for his/her survey.

You will provide this code to your partner. We will remind you about this code at the end of the survey.

Your unique code:

STOP! Please email the code you just created to your partner who will be completing the other survey, along with the link below, before completing the rest of your survey:

https://ucsbltsc.qualtrics.com/SE/?SID=SV_74n1B4CN1rXlfUN

I have emailed this link AND my unique code to my partner.

Please indicate the initials of your sexual partner (first initial, last initial).

Please indicate your relationship status with this person (select all that apply):

I am in a monogamous relationship (only dating one person exclusively and no one else).

I am in a committed relationship.

I am in an open relationship (this can mean many things, but for example, open to dating other people, open to sexual relationships, etc.)

I am in a casual relationship (for example, you don't view this relationship as a serious romantic relationship or it hasn't yet developed to that point).

I would classify this relationship as "friends with benefits."

I am unsure of my relationship status.

Other (please specify):

Sexual Episode Identification #1

We will ask you to first identity the two most recent sexual episodes with the person you are reporting on. We will ask you a few basic questions about each of those episodes. Then we will ask you more detailed questions about each of those episodes separately.

Please start with the **most recent** sexual episode between you and the person you are reporting on. When did you engage in sexual activity with your partner?

Day of the week:

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Date/time the sexual activity began (please indicate the date MM / DD / YYYY and time HH: MM AM/PM)

Where did this occur? (Please do not include any personal details such as addresses; just describe the place generally, such as “my girlfriend’s house.”)

What did the sexual activity involve?

Penile-vaginal intercourse
Anal sex
Oral sex - giver
Oral sex - receiver
Hand stimulation - giver
Hand stimulation - receiver
Other - please specify:

How well can you recall the details of this sexual episode?

Not very well ○ ○ ○ ○ ○ ○ ○ Extremely vividly

Everything that happened in this sexual episode was something I wanted to happen.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

Sexual Episode Identification #2

Please focus on the **second most recent** sexual episode between you and the person you are reporting on. When did you engage in sexual activity with your partner?

Day of the week:

Sunday
Monday
Tuesday
Wednesday
Thursday
Friday

Saturday

Date/time the sexual activity began (please indicate the date MM / DD / YYYY and time HH: MM AM/PM)

Where did this occur? (Please do not include any personal details such as addresses; just describe the place generally, such as “my girlfriend’s house.”)

What did the sexual activity involve?

Penile-vaginal intercourse

Anal sex

Oral sex - giver

Oral sex - receiver

Hand stimulation - giver

Hand stimulation - receiver

Other - please specify:

How well can you recall the details of this sexual episode?

Not very well ○ ○ ○ ○ ○ ○ ○ Extremely vividly

Everything that happened in this sexual episode was something I wanted to happen.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

Narrative Reconstruction of Sexual Episode #1

Instructions: With episode 1 in mind (the one that occurred on ${q://QID6/ChoiceGroup/SelectedChoices}, ${q://QID7/ChoiceTextEntryValue}), we would like you to please write, in as much detail as possible, about the events that led up to this episode. In other words, please “tell the story” of what happened between you two, describing any discussion you had with your partner (with words or body language), any touching/kissing that took place, or anything else that you think is important.)

We would like you to be comfortable to be as open as possible. The purpose of this exercise is to prompt your thinking about the verbal and nonverbal communication that occurred prior to and during the sexual episode. Remember, your name will never be linked to these data, and your partner will not read what you write. Please take 10-15 minutes for this exercise.

As a reminder, you noted that these activities occurred in that time:
${q://QID9/ChoiceGroup/SelectedChoices}

Possible Communication During Sexual Episode #1

The following includes a list of a number of things that may or may not have occurred in the sexual episode that you just wrote about. Keeping in mind the details you just recorded, as well as any other details you remember from that episode, please read each item and indicate 1 (this did not occur), 2 (this is very close to what occurred), or 3 (this occurred exactly).

Please keep in mind that if something close to this occurred, but not in the exact language, we would like you to select at "2" – that it was close to what occurred. Please check the items if they *ever* occurred in this episode (regardless if they are in a different order from how events unfolded).

	This did NOT occur.	This is very close to what occurred.	This occurred exactly.
You asked if she/he had a condom.	○	○	○
She/he asked if you had a condom.	○	○	○
You talked about the importance of using birth control if you do have sex.	○	○	○
She/he talked about the importance of using birth control if you do have sex.	○	○	○
You talked about your positive feelings about having sex with him/her.	○	○	○
She/he talked about her/his positive feelings about having sex with you.	○	○	○
You rubbed, fondled, and touched him/her sexually.	○	○	○
She/he rubbed, fondled, and touched you sexually.	○	○	○
You put your hands down his/her pants.	○	○	○
She/he put her/his hands down your pants.	○	○	○
You kissed him/her in return.	○	○	○
He/she kissed you in return.	○	○	○

He/she kissed you in return.	○	○	○
You started having dry sex with him/her (humping with clothes on).	○	○	○
You said, "I'm drunk."	○	○	○
He/she said, "I'm drunk."	○	○	○
You said, "No" in response to a sexual act.	○	○	○
She/he said, "No" in response to a sexual act.	○	○	○
You did not resist his/her sexual advances.	○	○	○
He/she did not resist your sexual advances.	○	○	○
You didn't stop him/her from kissing you and touching you sexually.	○	○	○
He/she didn't stop you from kissing him/her and touching him/her sexually.	○	○	○
You did not say no.	○	○	○
He/she did not say no.	○	○	○
You let him/her take your clothes off.	○	○	○
She/he let you take his/her clothes off.	○	○	○

Empathic Accuracy Task Episode #1

Any of the behaviors from the previous page that you selected as having occurred during this sexual episode are now listed on this page for the next task. We're interested in the specific content of your thoughts and feelings during the time each specific event occurred.

In other words, try to focus on that particular moment, and type what you remember thinking and feeling. Then, reflect on what you thought your partner was thinking and feeling in that same moment. Please take your time with this task.

I understand what I'm being asked to do.

You reported that: You asked if she/he had a condom.

What were you thinking and feeling during that time?

You reported that: She/he asked if you had a condom.

What were you thinking and feeling during that time?

You reported that: You talked about the importance of using birth control if you do have sex.

What were you thinking and feeling during that time?

You reported that: She/he talked about the importance of using birth control if you do have sex.

What were you thinking and feeling during that time?

You reported that: You talked about your positive feelings about having sex with him/her.

What were you thinking and feeling during that time?

You reported that: He/she talked about his/her positive feelings about having sex with you.

What were you thinking and feeling during that time?

You reported that: You rubbed, fondled, and touched him/her sexually.

What were you thinking and feeling during that time?

You reported that: He/she rubbed, fondled, and touched you sexually.

What were you thinking and feeling during that time?

You reported that: You put your hands down his/her pants.

What were you thinking and feeling during that time?

You reported that: He/she put his/her hands down your pants.

What were you thinking and feeling during that time?

You reported that: You kissed him/her in return.

What were you thinking and feeling during that time?

You reported that: He/she kissed you in return.

What were you thinking and feeling during that time?

You reported that: You started having dry sex with him/her (humping with clothes on).

What were you thinking and feeling during that time?

You reported that: You said, "I'm drunk."

What were you thinking and feeling during that time?

You reported that: He/she said, "I'm drunk."

What were you thinking and feeling during that time?

You reported that: You said "No" in response to a sexual act.

What were you thinking and feeling during that time?

You reported that: He/she said, "No" in response to a sexual act.

What were you thinking and feeling during that time?

You reported that: You did not resist his/her sexual advances.

What were you thinking and feeling during that time?

You reported that: He/she did not resist your sexual advances.

What were you thinking and feeling during that time?

You reported that: You didn't stop him/her from kissing you and touching you sexually.

What were you thinking and feeling during that time?

You reported that: He/she didn't stop you from kissing him/her and touching him/her sexually.

What were you thinking and feeling during that time?

You reported that: You did not say no.

What were you thinking and feeling during that time?

You reported that: He/she did not say no.

What were you thinking and feeling during that time?

You reported that: You let him/her take your clothes off.

What were you thinking and feeling during that time?

You reported that: He/she let you take his/her clothes off.

What were you thinking and feeling during that time?

Consent Episode #1

In the episode you just talked about, to what extent do you feel that you both made an affirmative, unambiguous decision to engage in mutually agreed upon sexual activity?

1 (This describes exactly what happened)	2	3	4 (I'm not sure)	5	6	7 (This does not describe what happened)

What percentage of all the sexual activities in this sexual episode were ones in which you were enthusiastic about participating? Please provide a percentage:

What percentage of all the sexual activities in this sexual episode were ones in which you did not want to take part but you took part in anyway? Please provide a percentage:

Please indicate the extent to which you agree or disagree with each statement.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
All sexual activities in this sexual episode were ones in which I was enthusiastic about participating.	O	O	O	O	O	O	O
There were sexual activities during this episode in which I participated despite my preference that I not do so.	O	O	O	O	O	O	O
I provided either direct or indirect consent to all sexual activities in which I engaged in this sexual episode.	O	O	O	O	O	O	O
I was an active participant in all sexual activities in this sexual episode.	O	O	O	O	O	O	O

Was there any part of this sexual episode in which you engaged in sexual activity that you didn't want to participate in that moment?

Yes

No

If yes, please describe what happened in as much detail as you're comfortable (e.g., how did it start, what was your thought process, what happened next, etc.).

TMIM Measures - Episode #1

Instructions: For this next section, we'd like you to think about how you felt **BEFORE** the entire sexual episode. This means before the sexual activity and before anything you talked about prior to engaging in the sexual activity.

When referring to "consent about sex," please consider consent regarding the specific sexual act you specifically reported on. In some items, for brevity, "the issue" refers to your partner's consent, and "sex" refers to the below-the-belt sexual act.

How confident were you about whether your partner would consent to sex?

Not at all ○ ○ ○ ○ ○ ○ ○ Completely

How confident did you ***want*** to be about whether your partner would consent to sex?

Not at all ○ ○ ○ ○ ○ ○ ○ Completely

Before that episode, I knew less than I wanted to know about whether my partner would consent to sex.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

How important to you was having knowledge of your partner's consent?

Not at all important ○ ○ ○ ○ ○ ○ ○ Extremely important

How anxious did it make you to think about how much you wanted to know about your partner's consent and how much you actually understood about this issue?

Not at all anxious ○ ○ ○ ○ ○ ○ ○ Extremely anxious

The gap between how much I understood and how much I wanted to understand about my partner's consent was_____.

Not at all anxiety-producing ○ ○ ○ ○ ○ ○ ○ Extremely anxiety-producing

Before this episode, I felt like I could handle whatever I might find about my partner's consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I didn't think I'd be able to handle what I might find out related to my partner's consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I didn't feel that I had the ability to ask this person what s/he thought about his/her consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like I could approach this person to ask about his/her consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt that I had the ability to approach my partner to talk about this issue.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like I had the ability to understand his/her consent by indirectly asking for it.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like I could talk around the issue of consent with this person.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I thought I could read his/her body language to know if he/she consented.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt that I had the ability to get a better understanding of this issue by watching how this person acted.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like I could observe this person's behavior to get more information about consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like this person was sober enough to answer questions about his/her consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I thought this person would not be able to give me information about consent because he/she was too drunk.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I thought this person was capable of giving me information about his/her consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like this person would honestly tell me yes/no if he/she wasn't interested.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt that this person would be completely honest about his/her interest or lack thereof.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I didn't feel this person would give me truthful information about this issue.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I thought that talking to my partner about consent would reveal what I wanted to hear.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

My expectations about how a conversation about consent with my partner would go were:

Very postive ○ ○ ○ ○ ○ ○ ○ Very negative

How beneficial did you think the positive outcomes would be of talking to your partner about consent? (If you don't foresee any positive outcomes, leave blank).

Not at all beneficial ○ ○ ○ ○ ○ ○ ○ Extremely beneficial

How beneficial did you think the positive outcomes would be of hinting/communicating indirectly with your partner about consent? (If you don't foresee any positive outcomes, leave blank).

Not at all beneficial ○ ○ ○ ○ ○ ○ ○ ○ Extremely beneficial

Instructions: For the next few questions, we would now like you to reflect on the communication that took place **IN** the episode.

Did you seek your partner's consent to engage in the sex act you referred to in the episode?

Yes

No

Please rate how directly vs. indirectly you asked your partner about sexual consent.

Very directly ○ ○ ○ ○ ○ ○ ○ Very indirectly

I went out of my way to avoid discussing consent with my partner.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

During this episode, I joked or hinted about my partner's consent to see what my partner would say about it.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

During this episode, I observed my partner's nonverbal behavior to see if he/she consented to sexual activity.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

During this episode, I avoided talking about consent to my partner.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

Did you communicate your consent to engage in the sex act you referred to in the episode?

Yes

No

Please rate how directly vs. indirectly you communicated with your partner about sexual consent.

Very directly ○ ○ ○ ○ ○ ○ ○ Very indirectly

Please rate the following statement: I went out of my way to avoid communicating what I consented to with my partner.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

During this episode, I joked or hinted about my own feelings about consent to see what my partner would say about it.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

Learning what my partner consented to/did not consent to produced...

A lot of negative emotions ○ ○ ○ ○ ○ ○ ○ A lot of positive emotions

Discussing consent with my partner...

1 (Very much harmed how he/she sees me)	2	3	4 (Had no impact on how he/she sees me)	5	6	7 (Very much improved how he/she sees me)

Talking to my partner about consent...

1 (Very negatively affected his/her perception of me)	2	3	4 (Had no impact on his/her perception of me)	5	6	7 (Very positively affected his/her perception of me)

Discussing consent with my partner had...

1 (A very negative effect on our relationship)	2	3	4 (No effect on our relationship)	5	6	7 (A very positive effect on our relationship)

Post-Sex Affectionate Behavior Measures - Episode #1

How long did you engage (in minutes) in the following behaviors AFTER sexual activity (in sexual episode 1):

Post-sex cuddling, caressing, and/or spooning:

Post-sex kissing:

Post-sex intimate talk, such as professing love:

Post-sex casual talk, such as updating your partner on your life:

How satisfied were you with these post-sex behaviors?

Not satisfied at all ○ ○ ○ ○ ○ ○ ○ Completely satisfied

If you are paying attention, please leave the answer to this question BLANK.

Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

Please think about how you communicated with your partner AFTER sexual activity (EPISODE 1) and respond to the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I expressed some positive feelings for my partner to him/her.	○	○	○	○	○	○	○
I thought talking about my feelings would benefit our relationship.	○	○	○	○	○	○	○
I saw some risks in telling my partner my feelings for him/her.	○	○	○	○	○	○	○
I disclosed good things I feel for my partner to him/her.	○	○	○	○	○	○	○
I thought there would be positive outcomes to telling my partner how I felt.	○	○	○	○	○	○	○
I saw some danger in expressing my feelings for my partner.	○	○	○	○	○	○	○
I told my partner some negative thoughts I've been having about him/her.	○	○	○	○	○	○	○
I thought there would be							

benefits to telling him/her how I felt.	O	O	O	O	O	O	O
It seemed risky to express my feelings to my partner.	O	O	O	O	O	O	O

Narrative Reconstruction of Sexual Episode #2

Instructions: With episode 2 in mind (the one that occurred on ${q://QID64/ChoiceGroup/SelectedChoices}, ${q://QID65/ChoiceTextEntryValue}), we would like you to please write, in as much detail as possible, about the events that led up to this episode. In other words, please "tell the story" of what happened between you two, describing any discussion you had with your partner (with words or body language), any touching/kissing that took place, or anything else that you think is important.)

We would like you to be comfortable to be as open as possible. The purpose of this exercise is to prompt your thinking about the verbal and nonverbal communication that occurred prior to and during the sexual episode. Remember, your name will never be linked to these data, and your partner will not read what you write. Please take 10-15 minutes for this exercise.

As a reminder, you noted that these activities occurred in that time:
${q://QID67/ChoiceGroup/SelectedChoices}

Possible Communication During Sexual Episode #2

The following includes a list of a number of things that may or may not have occurred in the sexual episode that you just wrote about. Keeping in mind the details you just recorded, as well as any other details you remember from that episode, please read each item and indicate 1 (this did not occur), 2 (this is very close to what occurred), or 3 (this occurred exactly).

Please keep in mind that if something close to this occurred, but not in the exact language, we would like you to select at "2" – that it was close to what occurred. Please check the items if they *ever* occurred in this episode (regardless if they are in a different order from how events unfolded).

	This did NOT occur.	This is very close to what occurred.	This occurred exactly.
You asked if she/he had a condom.	O	O	O
She/he asked if you had a condom.	O	O	O
You talked about the importance of using birth	O	O	O

control if you do have sex.			
She/he talked about the importance of using birth control if you do have sex.	O	O	O
You talked about your positive feelings about having sex with him/her.	O	O	O
She/he talked about her/his positive feelings about having sex with you.	O	O	O
You rubbed, fondled, and touched him/her sexually.	O	O	O
She/he rubbed, fondled, and touched you sexually.	O	O	O
You put your hands down his/her pants.	O	O	O
She/he put her/his hands down your pants.	O	O	O
You kissed him/her in return.	O	O	O
He/she kissed you in return.	O	O	O
You started having dry sex with him/her (humping with clothes on).	O	O	O
You said, "I'm drunk."	O	O	O
He/she said, "I'm drunk."	O	O	O
You said, "No" in response to a sexual act.	O	O	O
She/he said, "No" in response to a sexual act.	O	O	O
You did not resist his/her sexual advances.	O	O	O
He/she did not resist your sexual advances.	O	O	O
You didn't stop him/her from kissing you and touching you sexually.	O	O	O
He/she didn't stop you from kissing him/her and touching him/her sexually.	O	O	O
You did not say no.	O	O	O
He/she did not say no.	O	O	O
You let him/her take your clothes off.	O	O	O
She/he let you take his/her clothes off.	O	O	O

Empathic Accuracy Task Episode #2

Any of the behaviors from the previous page that you selected as having occurred during this sexual episode are now listed on this page for the next task. We're interested in the specific content of your thoughts and feelings during the time each specific event occurred.

In other words, try to focus on that particular moment, and type what you remember thinking and feeling. Then, reflect on what you thought your partner was thinking and feeling in that same moment. Please take your time with this task.

I understand what I'm being asked to do.

You reported that: You asked if she/he had a condom.

What were you thinking and feeling during that time?

You reported that: She/he asked if you had a condom.

What were you thinking and feeling during that time?

You reported that: You talked about the importance of using birth control if you do have sex.

What were you thinking and feeling during that time?

You reported that: She/he talked about the importance of using birth control if you do have sex.

What were you thinking and feeling during that time?

You reported that: You talked about your positive feelings about having sex with him/her.

What were you thinking and feeling during that time?

You reported that: She/he talked about her/his positive feelings about having sex with you.

What were you thinking and feeling during that time?

You reported that: You rubbed, fondled, and touched him/her sexually.

What were you thinking and feeling during that time?

You reported that: He/she rubbed, fondled, and touched you sexually.

What were you thinking and feeling during that time?

You reported that: You put your hands down his/her pants.

What were you thinking and feeling during that time?

You reported that: He/she put his/her hands down your pants.

What were you thinking and feeling during that time?

You reported that: You kissed him/her in return.

What were you thinking and feeling during that time?

You reported that: He/she kissed you in return.

What were you thinking and feeling during that time?

You reported that: You started having dry sex with him/her (humping with clothes on).

What were you thinking and feeling during that time?

You reported that: You said, "I'm drunk."

What were you thinking and feeling during that time?

You reported that: He/she said, "I'm drunk."

What were you thinking and feeling during that time?

You reported that: You said "No" in response to a sexual act.

What were you thinking and feeling during that time?

You reported that: He/she said, "No" in response to a sexual act.

What were you thinking and feeling during that time?

You reported that: You did not resist his/her sexual advances.

What were you thinking and feeling during that time?

You reported that: He/she did not resist your sexual advances.

What were you thinking and feeling during that time?

You reported that: You didn't stop him/her from kissing you and touching you sexually.

What were you thinking and feeling during that time?

You reported that: He/she didn't stop you from kissing him/her and touching him/her sexually.

What were you thinking and feeling during that time?

You reported that: You did not say no.

What were you thinking and feeling during that time?

You reported that: He/she did not say no.

What were you thinking and feeling during that time?

You reported that: You let him/her take your clothes off.

What were you thinking and feeling during that time?

You reported that: He/she let you take his/her clothes off.

What were you thinking and feeling during that time?

Consent Episode #2

In the episode you just talked about, to what extent do you feel that you both made an affirmative, unambiguous decision to engage in mutually agreed upon sexual activity?

1 (This describes exactly what happened)	2	3	4 (I'm not sure)	5	6	7 (This does not describe what happened)

What percentage of all the sexual activities in this sexual episode were ones in which you were enthusiastic about participating? Please provide a percentage:

What percentage of all the sexual activities in this sexual episode were ones in which you did not want to take part but you took part in anyway? Please provide a percentage:

Please indicate the extent to which you agree or disagree with each statement.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
All sexual activities in this sexual episode were ones in which I was enthusiastic about participating.	O	O	O	O	O	O	O
There were sexual activities during this episode in which I participated despite my preference that I not do so.	O	O	O	O	O	O	O
I provided either direct or indirect consent to all sexual activities in which I engaged in this sexual episode.	O	O	O	O	O	O	O
I was an active participant in all sexual activities in this sexual episode.	O	O	O	O	O	O	O

Was there any part of this sexual episode in which you engaged in sexual activity that you didn't want to participate in that moment?

Yes

No

If yes, please describe what happened in as much detail as you're comfortable (e.g., how did it start, what was your thought process, what happened next, etc.).

TMIM Measures - Episode #2

Instructions: For this next section, we'd like you to think about how you felt **BEFORE** the entire sexual episode. This means before the sexual activity and before anything you talked about prior to engaging in the sexual activity.

When referring to "consent about sex," please consider consent regarding the specific sexual act you specifically reported on. In some items, for brevity, "the issue" refers to your partner's consent, and "sex" refers to the below-the-belt sexual act.

How confident were you about whether your partner would consent to sex?

Not at all ○ ○ ○ ○ ○ ○ ○ Completely

How confident did you ***want*** to be about whether your partner would consent to sex?

Not at all ○ ○ ○ ○ ○ ○ ○ Completely

Before that episode, I knew less than I wanted to know about whether my partner would consent to sex.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

How important to you was having knowledge of your partner's consent?

Not at all important ○ ○ ○ ○ ○ ○ ○ Extremely important

How anxious did it make you to think about how much you wanted to know about your partner's consent and how much you actually understood about this issue?

Not at all anxious ○ ○ ○ ○ ○ ○ ○ Extremely anxious

The gap between how much I understood and how much I wanted to understand about my partner's consent was_____.

Not at all anxiety-producing ○ ○ ○ ○ ○ ○ ○ Extremely anxiety-producing

Before this episode, I felt like I could handle whatever I might find about my partner's consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I didn't think I'd be able to handle what I might find out related to my partner's consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I didn't feel that I had the ability to ask this person what s/he thought about his/her consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like I could approach this person to ask about his/her consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt that I had the ability to approach my partner to talk about this issue.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like I had the ability to understand his/her consent by indirectly asking for it.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like I could talk around the issue of consent with this person.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I thought I could read his/her body language to know if he/she consented.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt that I had the ability to get a better understanding of this issue by watching how this person acted.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like I could observe this person's behavior to get more information about consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like this person was sober enough to answer questions about his/her consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I thought this person would not be able to give me information about consent because he/she was too drunk.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I thought this person was capable of giving me information about his/her consent.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt like this person would honestly tell me yes/no if he/she wasn't interested.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I felt that this person would be completely honest about his/her interest or lack thereof.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I didn't feel this person would give me truthful information about this issue.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

I thought that talking to my partner about consent would reveal what I wanted to hear.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

My expectations about how a conversation about consent with my partner would go were:

Very postive ○ ○ ○ ○ ○ ○ ○ Very negative

How beneficial did you think the positive outcomes would be of talking to your partner about consent? (If you don't foresee any positive outcomes, leave blank).

Not at all beneficial ○ ○ ○ ○ ○ ○ ○ Extremely beneficial

How beneficial did you think the positive outcomes would be of hinting/communicating indirectly with your partner about consent? (If you don't foresee any positive outcomes, leave blank.)

Not at all beneficial ○ ○ ○ ○ ○ ○ ○ Extremely beneficial

Instructions: For the next few questions, we would now like you to reflect on the communication that took place **IN** the episode.

Did you seek your partner's consent to engage in the sex act you referred to in the episode?

Yes

No

Please rate how directly vs. indirectly you asked your partner about sexual consent.

Very directly ○ ○ ○ ○ ○ ○ ○ Very indirectly

I went out of my way to avoid discussing consent with my partner.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

During this episode, I joked or hinted about my partner's consent to see what my partner would say about it.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

During this episode, I observed my partner's nonverbal behavior to see if he/she consented to sexual activity.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

During this episode, I avoided talking about consent to my partner.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

Did you communicate your consent to engage in the sex act you referred to in the episode?

Yes

No

Please rate how directly vs. indirectly you communicated with your partner about sexual consent.

Very directly ○ ○ ○ ○ ○ ○ ○ Very indirectly

Please rate the following statement: I went out of my way to avoid communicating what I consented to with my partner.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

During this episode, I joked or hinted about my own feelings about consent to see what my partner would say about it.

Strongly agree ○ ○ ○ ○ ○ ○ ○ Strongly disagree

Learning what my partner consented to/did not consent to produced...

A lot of negative emotions ○ ○ ○ ○ ○ ○ ○ A lot of positive emotions

Discussing consent with my partner...

1 (Very much harmed how he/she sees me)	2	3	4 (Had no impact on how he/she sees me)	5	6	7 (Very much improved how he/she sees me)

Talking to my partner about consent...

1 (Very negatively affected his/her perception of me)	2	3	4 (Had no impact on his/her perception of me)	5	6	7 (Very positively affected his/her perception of me)

Discussing consent with my partner had...

1 (A very negative effect on our relationship)	2	3	4 (No effect on our relationship)	5	6	7 (A very positive effect on our relationship)

Post-Sex Affectionate Behavior Measure - Episode #2

How long did you engage (in minutes) in the following behaviors AFTER sexual activity (in sexual episode 2):

Post-sex cuddling, caressing, and/or spooning:

Post-sex kissing:

Post-sex intimate talk, such as professing love:

Post-sex casual talk, such as updating your partner on your life:

How satisfied were you with these post-sex behaviors?

Not satisfied at all ○ ○ ○ ○ ○ ○ ○ Completely satisfied

If you are paying attention, please leave the answer to this question BLANK.

Strongly disagree ○ ○ ○ ○ ○ ○ ○ Strongly agree

Please think about how you communicated with your partner AFTER sexual activity (EPISODE 1) and respond to the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I expressed some positive feelings for my partner to him/her.	○	○	○	○	○	○	○
I thought talking about my feelings would benefit our relationship.	○	○	○	○	○	○	○
I saw some risks in telling my partner my feelings for him/her.	○	○	○	○	○	○	○
I disclosed good things I	○	○	○	○	○	○	○

feel for my partner to him/her.							
I thought there would be positive outcomes to telling my partner how I felt.							
I saw some danger in expressing my feelings for my partner.							
I told my partner some negative thoughts I've been having about him/her.							
I thought there would be benefits to telling him/her how I felt.							
It seemed risky to express my feelings to my partner.							

Relationship & Belief Questions

Think about the power relationship between you and your partner. In your relationship with that person overall, how would you characterize the balance of power between you?

	My partner	-	-	Both of us equally	-	-	Me
Who has more power overall?							
Who influences the other more?							
Who can more easily persuade the other?							
Who is more important to the relationship?							

Please think about your own beliefs, and indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
If a girl is raped while she is drunk, she is at least somewhat responsible for letting things get out of hand.							
Guys don't usually intend to force sex on a girl, but sometimes they get too sexually carried away.							
If a girl doesn't physically							

resist sex—even if protesting verbally—it can't be considered rape.	O	O	O	O	O	O	O
A lot of times, girls who say they were raped agreed to have sex and then regret it.	O	O	O	O	O	O	O
If a girl goes to a room alone with a guy at a party, it is her own fault if she is raped.	O	O	O	O	O	O	O
It shouldn't be considered rape if a guy is drunk and didn't realize what he was doing.	O	O	O	O	O	O	O
A rape probably doesn't happen if a girl doesn't have any bruises or marks.	O	O	O	O	O	O	O
Rape accusations are often used as a way of getting back at guys.	O	O	O	O	O	O	O
When girls get raped, it's often because the way they said "no" was unclear.	O	O	O	O	O	O	O
If both people are drunk, it can't be rape.	O	O	O	O	O	O	O
If a girl doesn't say "no" she can't claim rape.	O	O	O	O	O	O	O

Below is a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.	O	O	O	O	O	O
Many women have a quality of purity that few men possess.	O	O	O	O	O	O
Women should be cherished and protected by men.	O	O	O	O	O	O
Every man ought to have a woman whom he adores.	O	O	O	O	O	O
A good woman should be set on a pedestal by her man.	O	O	O	O	O	O
Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.	O	O	O	O	O	O
Women, as compared to men, tend to have a more refined sense of culture and good taste.	O	O	O	O	O	O
Women, compared to men, tend to	O	O	O	O	O	O

have a superior moral sensibility.

These items are concerned with the extent to which you have discussed the following topics about sexuality with your partner. To respond, indicate how much you have discussed these topics with an intimate partner.

	I have not discussed this topic with my current sexual partner.	I have slightly discussed this topic with my current partner.	I have moderately discussed this topic with my current partner.	I have mostly discussed this topic with my current sexual partner.	I have fully discussed this topic with my current sexual partner.
My past sexual experiences.	O	O	O	O	O
Times when sex was distressing for me.	O	O	O	O	O
The times I have pretended to enjoy sex.	O	O	O	O	O
Times when I prefer to refrain from sexual activity.	O	O	O	O	O
My own ideas about sexual accountability.	O	O	O	O	O
Concerns that I have about sexually transmitted infections and diseases.	O	O	O	O	O
How I feel about pregnancy at this time.	O	O	O	O	O

Please indicate on a scale of 1 to 5 how sure you are that you would be able to say NO to having sexual intercourse with your current sexual partner for each item.

	1 (not sure at all)	2	3	4	5 (extremely sure)
On a normal day?	O	O	O	O	O
When your partner is pushing you to have sexual intercourse?	O	O	O	O	O
After you have been smoking sexual marijuana?	O	O	O	O	O
After you have been drinking alcohol?	O	O	O	O	O
When you don't feel like it?	O	O	O	O	O

Please indicate on a scale of 1 to 5 how sure you are that YOUR PARTNER would be able to say NO to having sexual intercourse with your current sexual partner for each item.

	1 (not sure at all)	2	3	4	5 (extremely sure)
On a normal day?	O	O	O	O	O

When your partner is pushing you to have sexual intercourse?	O	O	O	O	O
After you have been smoking sexual marijuana?	O	O	O	O	O
After you have been drinking alcohol?	O	O	O	O	O
When you don't feel like it?	O	O	O	O	O

Please indicate on a scale of 1 to 5 how sure you are that you would be able to discuss each of the following with your current sexual partner.

	1 (not sure at all)	2	3	4	5 (extremely sure)
Ask your partner if he/she has ever injected drugs as heroin or cocaine into his/her veins?	O	O	O	O	O
Discussing preventing AIDS or sexually transmitted diseases (gonorrhea, etc.) with your partner?	O	O	O	O	O
Discuss preventing pregnancy with your current sexual partner?	O	O	O	O	O
Ask your partner about sexual relationships that he/she has had in the past?	O	O	O	O	O
Ask your partner if he/she has ever had anal (rectal or butt) intercourse?	O	O	O	O	O
Ask your partner if he/she has ever had a sexually transmitted disease?	O	O	O	O	O

These questions ask about your relationship with your partner.

	1 (Not at all)	2	3 (Somewhat)	4	5 (A great deal)
How often does your partner express affection or liking for you?	O	O	O	O	O
How close do you feel to your partner?	O	O	O	O	O
How intimate do you feel with your partner?	O	O	O	O	O
How emotionally connected do you feel to your partner?	O	O	O	O	O
How satisfied are you with your relationship with your partner?	O	O	O	O	O

Overall, how would you describe your sexual relationship with your partner?

Very good	O	O	O	O	O	Very bad
Very pleasant	O	O	O	O	O	Very unpleasant
Very positive	O	O	O	O	O	Very negative
Very satisfying	O	O	O	O	O	Very unsatisfying
Very valuable	O	O	O	O	O	Worthless

Overall, how would you describe your sexual relationship with your partner?

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
My partner rarely responds when I want to talk about our sex life.	O	O	O	O	O	O
Some sexual matters are too upsetting to discuss with my sexual partner.	O	O	O	O	O	O
There are sexual issues or problems in our sexual relationship that we have never discussed.	O	O	O	O	O	O
My partner and I have never had a heart-to-heart talk about our sex life together.	O	O	O	O	O	O
My partner has no difficulty in talking to me about his or her sexual feelings and desires.	O	O	O	O	O	O
Talking about sex is a satisfying experience for both of us.	O	O	O	O	O	O
I have little difficulty in telling my partner what I do or don't do sexually.	O	O	O	O	O	O

Please indicate your confidence regarding the following statements in terms of a percentage, where 0% = no confidence at all and 100% indicates complete certainty. You can just indicate the percentage in terms of a number (example: for 80% confidence, indicate 80).

	Confidence (Percentage)
In general, I can discern what specific sexual acts my partner consents to engage in.	
In the episodes I reported on, I knew what specific acts my partner consented to engage in with me.	
I have the ability to accurately "read" my partner.	
In general, I know what my partner is thinking and feeling.	

What is your age?

What is your sexual identity?

Straight
Gay
Lesbian
Bisexual
Other (please specify):

What is your race or ethnicity?

Caucasian
African American
Latino/a or Hispanic
Native American
Asian
Other (please specify):

What best describes your relationship with the person you reported on?

Friends with benefits
Dating partners
Spouse
Other (please specify):

What is your current marital status?

Single
Married
Divorced
Remarried

Approximately how many times per week do you engage in penile/vaginal intercourse?

Approximately how many times per week do you engage in other sexual activity?

How long have you been sexually active with this partner (i.e., sexual intercourse or any below the belt stimulation)?

The times I reported on were the first times I was sexually active with this partner.

1-3 weeks.

1-3 months.

Do you have other sexual partners besides the one you are focusing on in this survey?

Yes

No

If yes, how many other sexual partners do you currently have?

Rate your relationship satisfaction with your partner by deciding what term best describes your relationship at the moment:

Miserable	O O O O O	Enjoyable
Disappointing	O O O O O	Rewarding
Completely dissatisfying	O O O O O	Completely satisfying

In general in your relationship with this person, to what extent do you only engage in sexual activity that is mutually agreed upon by an affirmative, unambiguous decision?

1 (All the time) 2 3 4 (Sometimes) 5 6 7 (Never)

Please answer the following questions with your feelings during the past month in mind. How much of the time, during the past month...

	None of the	A little bit of	Some of the	A good bit of	Most of the	All of the

	time	the time	time	the time	time	time
...were you a happy person?	O	O	O	O	O	O
...have you felt calm and peaceful?	O	O	O	O	O	O
...have you felt downhearted and blue?	O	O	O	O	O	O
...have you felt so down in the dumps that nothing could cheer you up?	O	O	O	O	O	O

Please indicate the extent to which you agree or disagree with each statement.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
Women usually say 'no' to sex when they mean 'yes.'	O	O	O	O	O	O	O
Going home with a man at the end of a date is a woman's way of communicating to him that she wants to have sex.	O	O	O	O	O	O	O
When a man only has to use a minimal amount of force on a woman to get her to have sex, it usually means she wants him to force her.	O	O	O	O	O	O	O

Please indicate the extent to which you agree or disagree with each statement.

	Strongly Disagree	Mildly Disagree	Agree Mildly	Agree Strongly
When girls say no, they often mean yes.	O	O	O	O
Girls who act seductively really want sex, even if they don't admit it.	O	O	O	O
Girls generally want to be talked into having sex.	O	O	O	O
Women often say no because they don't want women to think they're easy.	O	O	O	O

This is the last item on the survey. We want to remind you about the code you created in the beginning. Your partner will need to enter this same code when he/she begins his/her survey. We will provide you the link to send to your partner on the Thank You page in case you have not already sent the link and code.

The code you created was: ${q://QID1/ChoiceTextEntryValue}

I remember this code or I have written this code down.