UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

EXAMINING THE MEDIATING ROLE OF SEXUAL COMMUNICATION DISCREPANCIES

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

ANTHONY T. MACHETTE
Norman, Oklahoma
2023

Downloaded from SHAREOK. Persistent Handle URL: https://hdl.handle.net/11244/337513

EXAMINING THE MEDIATING ROLE OF SEXUAL COMMUNICATION DISCREPANCIES

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF COMMUNICATION

BY THE COMMITTEE CONSISTING OF

Dr. Ioana A. Cionea, Chair

Dr. Mauricio Carvallo

Dr. Amy Janan Johnson

Dr. Gretchen Montgomery-Vestecka

© Copyright by ANTHONY MACHETTE
All Rights Reserved.

DEDICATION

To Ernie.
You were the best dog ever. We miss you every day.

ACKNOWLEDGMENTS

Entering this graduate program, I recognized that getting a Ph.D. was a lot of work. However, I did not realize how much work it was for all of those around me. Earning this degree, and all the other small victories that came along with it, was, without a doubt, due to numerous individuals whose names will not appear on the diploma. To all of you, I am eternally grateful.

First, I want to thank Dr. Ioana Cionea. I cannot imagine that being my advisor was easy, but you were always the best advisor I could have asked for. You are the reason I selected OU. From day one, you allowed me to hit the ground running. When others would have limited me, you allowed me to pursue my goals and were there to help me out when I got in too deep. You allowed me to follow my intellectual curiosity, even when it turned out to have nothing to do with your own research. Furthermore, when that curiosity led me away from a traditional academic career, you continued to support me, as you put my happiness above all else. Any success that I may be able to claim during my time at OU is a direct representation of your selflessness, sacrifice, and hard work. While you are a great advisor, you are an even better human. I am forever grateful for your compassion, our walks with Birdie, our Zoom and phone calls covering all topics, and all the food. I appreciate everything you and Dave have done for Jenny and me.

I also want to thank Dr. Gretchen Montgomery-Vestecka. I am thrilled we have had the chance to work together so much over the past couple of years, and more importantly, to become friends. I am happy I got to wrap up my time teaching while serving as your TA and I am thankful for all of our chats after class. I appreciate (and needed) all those reminders that this dissertation will get done. More important than the academic side of things, becoming friends with you and Mark has been one of the highlights of my time at OU. Fiona, Clover, the chickens,

and, most recently, Angel McBrown, brought so much joy to my, and Jenny's, time during my Ph.D. In short, thank you for being such a humble, caring friend during a challenging time in my life.

To Dr. Mauricio Carvallo, I am forever thankful that I took your class during the first year of my Ph.D. It was in your class that I first thought about examining intimate communication. It was your encouragement that pushed me to pursue, and, ultimately, conceptualize SCD. This encouragement, in turn, sparked a line of research that not only helped me academically but also led to my first job after graduation. I also appreciate your feedback throughout my general exams and dissertation process, which has undoubtedly made me a better researcher.

To Dr. Amy Johnson, thank you for your influence on me, as both a scholar and a researcher. Taking your course helped me understand how to be a better scholar by illuminating all the ways in which communication can be studied. It was in your class that I started to think outside my comfort zone and begin to develop new interests within the field. As a member of my committee, your feedback has pushed me to be a better researcher. I appreciate your openness to allowing me to combine SCD with my general exam questions, giving me the freedom to develop ideas that could ultimately turn into publications.

To the late, great, Dr. Irwin Mallin. When I wandered into my M.A. program, I struck gold ending up with you as my advisor. You taught me how to have fun teaching and encouraged me to be my authentic self. You had an amazing ability to know when to hype me up and when to calm me down while teaching me lessons that I did not even catch until after the fact. I had no idea that we would form the friendship that we did when I started my M.A. program. Over time, our chats moved from your office to car rides to your appointments, and ultimately, in hospice.

And while those chats got more difficult as time went on, they also became more valuable and something that I will always cherish. Admittedly, I sometimes wonder what guidance you would have offered throughout my Ph.D. Thank you for being my sensei, always being up to talk football, and for holding on long enough to know I finished my M.A. *Zikhrono livrakha.*

To the countless mentors that I have connected with along the way, I appreciate all of the time and advice you have offered me. To Mike, thank you from the bottom of my heart for your mentorship and our friendship. Our chats about sports were always my reward for finishing my work for the week. Your guidance, love, and support mean more to me than you know. Keli, I always looked forward to our chats. You have always been supportive of my goals and offered priceless advice within academia and beyond. Michelle, you have been an amazingly generous mentor, who took me under your wing when you had no reason to and connected me with amazing opportunities. You have always been able to give me a boost of confidence when I needed it the most. To the dozens of mentors that I have met in the UX community over the past year, you all helped me understand what working outside of academia with a Ph.D. entails. You all guided me on these life-changing decisions, for which I will always be thankful. Each of you played a vital role in this journey.

To my peers in my M.A. and Ph.D. programs, thank you for your support, friendship, and mentorship along the way. To CJ—you, Maddie, Mike, and Jen quickly became family to Jenny and me. I appreciate all of those talks in the parking lot, Third Way, and watching football together. The life-long friendship with you and the fam is something I will always cherish. To Chelsea, teaming up with you on so many occasions throughout my M.A. was an absolute blast. Our time together at PFW was full of creativity and humor, which always makes me smile. To Netty B., Stacy, and Olivia, thank you, all, for the various conversations in the GTA office that

got us through our programs. During my Ph.D. program, thank you to everyone in #TeamCionea. You all were instrumental in guiding me through these past four years. Thank you to Brittney, who has become a confidant during my program. It has been awesome getting to be your classmate, coauthor, and friend. To Julie, it has been fun to see someone else in the program with similar research interests. While I may not be vocal, I'm your biggest cheerleader and look forward to cheering you on through your Ph.D. and beyond!

To my family in the States and Taiwan, I cannot thank you all enough for how supportive and understanding you have been during the past four years. You have never made me feel guilty for missing the past four years' worth of visits and memories. To my parents, from my childhood, you have always allowed me to forge my own path, no matter how unconventional it was. You have both displayed extreme faith and patience in me throughout my life. From me leaving high school at 16, to moving away for college, living in Taiwan and Australia, and then me deciding I do not want to be an academic in the final year of my Ph.D. Thank you both for always believing that I would come out on top, even when I did not. Thank you to my sister, who cheered me along on all my adventures. Thanks for being my first hero and an amazing big sister. To 爸爸(盛頓)and 媽媽(淑媛), thank you for your endless support. Regardless of the distance and language barriers, I could always feel your support from around the world. 媽媽漂亮!

Finally, I want to thank my best friend, wife, and better half, Jenny. I am forever grateful for the love, support, and countless sacrifices you have made for me to be able to pursue this degree. After nine years together, I am still confused about how I got so lucky to be your husband but I am continually thankful for that stroke of fate. Thank you for reminding me to take care of myself during these past four years, and always offering perspective. Words cannot express what you mean to me but know that I'm excited about our next adventures.

Table of Contents

Dedication…… iv

Acknowledgements…….…….. v

Table of Contents…….…….. ix

List of Tables…….…… xi

List of Figures..…….…… xii

Abstract…….…….. xiii

Chapter 1: Introduction……..….. 1

Chapter 2: Literature Review……...……...13

Defining Sexual Communication……..…….13

Benefits and Challenges of Sexual Communication…….……..…...15

Sexual Self-Disclosure and Sexual Communication Discrepancies…….…….……20

Modeling Sexual Communication Discrepancies as Mediators……..…..25

A Review of Existing Models of Sexual Self-Disclosure……..…….….. 26

Limitations of Existing Models of Sexual Self-Disclosure……..…….……38

A Mediation Model of Sexual Communication Discrepancies…….…....39

Chapter 3: Method……...……...…….. 65

Study Design……..……..……..65

Participants……..…...65

Procedures……..….....69

Measures……..….69

Chapter 4: Results……..……....74

Data Cleaning……..……..…74

Covariate Analysis……..……..….76

Regression Analysis ……..……..…..80

Mediation Analysis ……..……..…...88

Chapter 5: Discussion……...……...114

Theoretical Implications……..…..……..……122

Practical Implications……..……....……126

Limitations……..……..……...…129

Directions for Future Research……..……...……...131

Conclusion……..……..…...143

References……146

Appendix A……...…176

Appendix B……...…177

Appendix C……..178

Appendix D…….…….179

Appendix E……...……..….180

Appendix F……...…181

List of Tables

Table 1. Sample Characteristics ……..……..…….67

Table 2. Confirmatory Factor Analyses Results……...…….75

Table 3. Descriptive Statistics for Continuous Study Variables……...…….76

Table 4. Bivariate Correlations for Continuous, Observed, Composite Study Variables….…….78

Table 5. Bivariate Correlations for Continuous Demographic Variables and Observed, Composite Study Variables……..…….……78

Table 6. MANOVA Results for Sexual Frequency and Dependent, Observed, Continuous Study Variables……...…….82

Table 7. Hierarchical Regression Results for Attachment and Sexual Relationship Maintenance……...84

Table 8. Hierarchical Regression Results for Attachment and Sexual Experimentation …….84

Table 9. Hierarchical Regression Results for Attachment and Sexual Issues …….…….85

Table 10. Hierarchical Regression Results for Attachment and Safe Sex ……..….…….85

Table 11. Hierarchical Regression Results for SCD and Relational Satisfaction …….86

Table 12. Hierarchical Regression Results for SCD and Sexual Satisfaction ……..87

Table 13. Hierarchical Regression Results for Attachment and Relational Satisfaction ……..89

Table 14. Hierarchical Regression Results for Attachment and Sexual Satisfaction ……..….89

Table 15. Comparison of SCD Mediation with and without Sexual Self-Disclosure ……....111

Table 16. MANOVA Results for Sexual Frequency and SCD Variables……..….113

List of Figures

Figure 1. Mediation Model Results for Anxious Attachment and Relational Satisfaction…..….92

Figure 2. Mediation Model Results for Anxious Attachment and Sexual Satisfaction.……....93

Figure 3. Mediation Model Results for Avoidant Attachment and Relational Satisfaction.…….94

Figure 4. Mediation Model Results for Avoidant Attachment and Sexual Satisfaction.……..….96

Figure 5. Sexual Self-Disclosure Mediation Model Results for Anxious Attachment and Relational Satisfaction……...97

Figure 6. Sexual Self-Disclosure Mediation Model Results for Anxious Attachment and Relational Satisfaction……...…98

Figure 7. Sexual Self-Disclosure Mediation Model Results for Avoidant Attachment and Relational Satisfaction……...99

Figure 8. Sexual Self-Disclosure Mediation Model Results for Avoidant Attachment and Relational Satisfaction…….100

Figure 9. Mediation Model Results for Anxious Attachment and Relational Satisfaction…....102

Figure 10. Mediation Model Results for Anxious Attachment and Sexual Satisfaction.……....105

Figure 11. Mediation Model Results for Avoidant Attachment and Relational Satisfaction…..107

Figure 12. Mediation Model Results for Avoidant Attachment and Sexual Satisfaction.……...109

Abstract

Past literature has revealed that sexual communication behaviors are important to one's relationship, as such behaviors predict both relational and sexual satisfaction (Davis et al., 2006; Jones et al., 2018; Mallory, 2022). Furthermore, recent studies have revealed that sexual communication discrepancies (SCD) may play a similar role in predicting relational and sexual health outcomes (Machette, 2022a; Machette & Montgomery-Vestecka, 2023a, 2023b). Similarly, past work on attachment theory, sexual communication, and sexual self-disclosure suggests that individual characteristics, such as one's attachment, may predict several communication behaviors, including SCD (Coffelt & Hess, 2014; Lopez Portillo, 2020; Machette & Drouin, 2023). Therefore, this dissertation proposed that individual characteristics (i.e., one's attachment style) would predict sexual communication behaviors (i.e., SCD and sexual self-disclosure) which, in turn, were hypothesized to predict relational and sexual health outcomes (i.e., relational and sexual satisfaction). Additionally, this dissertation hypothesized that SCD would mediate the relationship between attachment styles and satisfaction. It also examined the potential mediating role of sexual self-disclosure within the same relationships, comparing sexual self-disclosure to SCD as potential mediators.

Results revealed that avoidant attachment negatively predicted the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD. Results also confirmed past studies that have found both the avoidant and anxious attachment style predicted relational and sexual satisfaction. Moreover, the analyses revealed that sexual relationship maintenance, sexual experimentation, and safe sex positively predicted relational satisfaction, whereas sexual issues negatively predicted relational satisfaction. In addition, sexual relationship maintenance and sexual experimentation positively predicted sexual satisfaction, whereas safe sex negatively

predicted sexual satisfaction. Furthermore, results revealed that the relationship between the anxious attachment style and relational satisfaction was partially mediated by the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD. The same two sub-dimensions of SCD partially mediated the relationship between the anxious attachment style and sexual satisfaction. Additionally, sexual relationship maintenance, sexual experimentation, and sexual self-disclosure partially mediated the relationship between the avoidant attachment style and sexual satisfaction. Finally, results revealed that the anxious and the avoidant attachment styles' relationship with sexual satisfaction was partially mediated by sexual self-disclosure. Taken together, this study took an initial step toward modeling the relationships between antecedents, sexual communication behaviors, and predicted outcomes, suggesting future research could be conducted to model further such relationship and articulate a theory of sexual communication.

Keywords: sexual communication discrepancies, attachment theory, sexual satisfaction

CHAPTER 1: INTRODUCTION

Sex is important to most healthy romantic relationships. For instance, individuals who are satisfied with their sex lives also report higher relationship and life satisfaction compared to those who report low sexual satisfaction (Brezsnyak & Whisman, 2004; Laumann et al., 2006; Regan, 2000; Sprecher, 2002). Furthermore, sex offers improved psychological and physiological function. For example, individuals who routinely participate in partnered sexual activity report improved blood pressure (Brody, 2006), mental health (Brody & Costa, 2009; Gallup Jr. et al., 2002), sexual function (Levin, 2003), metabolism (Brody, 2004), and resting heart rate variability (Brody et al., 2000). In addition, partnered sexual activity is related to a reduction in pain (Drabick et al., 1997; Whipple & Komisaruk, 1988) and cancer risks (Gjorgov, 1978; Giles et al., 2003; Lê et al., 1989; Leitzmann et al., 2004). Taken together, these findings illustrate the important role that sex plays in individuals' lives.

Yet, one's sex life is not limited to sexual activity, itself. Rather, an individual's sex life consists of several behaviors, including sexual communication, which is defined as the combination of discussions about various sexual topics with a sexual partner, and the frequency and quality of such communication (Metts & Cupach, 1989). Although discussions about sexual topics can occur in other instances as well, such as conversations within clinical spaces between patients seeking therapy and healthcare providers, such discussions are not considered to be part of the sexual communication definition as the interaction is guided by a trained professional, who is not part of the dyad (Coffelt, 2021). Similarly, discussions between parents and their children do not qualify as sexual communication given the interactants they involve (Flores & Barroso, 2017; Pariera, 2016). Thus, the key to understanding the definition of sexual

communication is the fact that it occurs between romantic partners who discuss aspects pertaining to their sexual life.

Past literature suggests that sexual communication is important to one's relationship. For instance, a recent meta-analysis revealed that sexual communication is positively associated with both relationship and sexual satisfaction (Mallory, 2022). Similarly, studies have found that inhibited sexual communication is predictive of sexual dissatisfaction (Davis et al., 2006). In other words, past work has revealed that more sexual communication is associated with a more satisfying relationship and sex life. Therefore, further investigations into sexual communication in romantic relationships can provide a better understanding of how sexual communication can be improved to increase couples' satisfaction as well.

One aspect of sexual communication, sexual self-disclosure, has been studied extensively and found to be notably influential to one's relational and sexual wellbeing. Several studies have revealed the importance of sexual self-disclosure to one's sex life. For instance, sexual self-disclosure has been associated with sexual satisfaction (Jones et al., 2018; Mark & Jozkowski, 2013; Thomas et al., 2015), sexual function (McCarthy & Fucito, 2005; Muin et al., 2015), and orgasm (Kelly et al., 2004; McCarthy & Fucito, 2005). Furthermore, individuals who reported being satisfied with their sexual self-disclosure also reported high levels of sexual satisfaction (Blunt-Vinti et al., 2019; Kentjana, 2021), emotional intimacy (Kentjana, 2021), and relationship satisfaction (Blunt-Vinti et al., 2019; Cupach & Comstock, 1990).

Sexual self-disclosure is distinct from sexual communication. The former captures the "degree to which a member of a romantic dyad discloses his or her sexual thoughts, feelings, and behavior to his or her partner" (Tang et al., 2013, p. 228). Thus, sexual self-disclosure is a component of sexual communication, a narrower term under the broader umbrella of sexual

communication. Sexual self-disclosure focuses only on one partner's acts of disclosure about their sexual preferences, whereas sexual communication encompasses conversations between the two partners about a variety of topics, as well as the quality or frequency of such discussions with a partner. Thus, albeit related, the two terms are not synonymous.

Interestingly, although past studies have illustrated the important role of sexual self-disclosure, most individuals report that they have trouble engaging in sexual self-disclosure and often avoid such discussions with their partners (Anderson et al., 2011; Brown & Weigel, 2018; Rehman et al., 2019). Individuals find sexual self-disclosure threatening due to three primary reasons (Rehman et al., 2019; Theiss & Estlein, 2014). First, individuals may perceive sexual self-disclosure as a threat to their identity. For example, one may fear that disclosing sexual information to their partner may result in feelings of shame and guilt. Second, sexual self-disclosure may be perceived as threatening to one's partner. For instance, many individuals fear that discussing sexual topics with their partner could create feelings of jealousy or distrust, as well as hurt their partner's feelings. Third, individuals may perceive that sexual self-disclosure could harm their relationship. For example, individuals often perceive that discussing sexual topics may reveal sexual incompatibility and spark conflict between romantic partners (Anderson et al., 2011; Machette & Cionea, 2022; Rehman et al., 2019). Thus, despite its benefits, sexual self-disclosure can also have costs.

Collectively, the existing literature reveals the important role that sexual self-disclosure plays in one's relationship and sex life. However, given the benefits and perceived threats of sexual self-disclosure, it is plausible that individuals may expect sexual self-disclosure but elect to withhold such discussions as they fear their perceived negative outcomes. Such instances create situations in which individuals face discrepancies between their expectations and their

experienced conversations. A recently introduced concept in the sexual communication literature, sexual communication discrepancies (SCD), is well-suited to examine the effects of such situations and will form the focus of this dissertation. SCD capture the difference between one's expectations for sexual communication and the amount of sexual communication that a person perceives takes place in their relationship (Machette et al., 2022). Conceptually, SCD are related to sexual self-disclosure, as they measure the difference between expectations and perceived sexual communication. More specifically, SCD are measurements of one's perception of the sexual communication in their relationship; they do not measure both partners' perceptions nor do they assess any actual communication behaviors, only perceptions. SCD, nevertheless, offer useful information about perceived discrepancies in sexual communication, which can be either positive (communication exceeds one's expectations), neutral (communication matches expectations), or negative (communication is less than expected). Similar to sexual self-disclosure (with which SCD are related as a form of sexual communication but distinct given their focus, as explained above), SCD may play an important role in individuals' relationships.

Building on research regarding the important role of sexual self-disclosure, recent studies have revealed that SCD are positively correlated with several aspects of individuals' relational and sexual lives, such as relational satisfaction (Machette, 2022a), sexual intimacy (Machette, 2022a), female sexual function (Machette & Montgomery, 2022a), and sexual satisfaction (Machette, 2022a; Machette & Montgomery, 2022a). As such, emerging research illustrates associations between SCD and various relational and sexual health outcomes. In other words, when discrepancies pertaining to sexual communication exist in one's relationships, other relational and sexual aspects may be affected. Thus, SCD may offer new insights into how discrepancies influence individuals' relational and sexual satisfaction (either positively or

negatively), which are significantly related to one's overall health and wellbeing (Proulx et al., 2007; Robles et al., 2014). Therefore, further examining SCD has important relational and clinical benefits, particularly for couples struggling with sexual challenges (Machette, 2022a).

To understand SCD better, it is important to recognize their antecedents, as well as their outcomes, to gain a well-rounded understanding of what may cause SCD to occur in the first place and what consequences the existence of SCD has on various facets of individuals' romantic relationships. Although SCD are a new concept to the literature, there is emerging research that offers insight into what variables may predict SCD. For example, a recent study found that relational uncertainty was negatively predictive of SCD (Machette, 2022a). Furthermore, avoidant attachment was found to be negatively predictive of one's expectations for sexual communication, as well as one's engagement in sexual communication, two concepts that are central to SCD (Machette & Drouin, 2023). Taken together, such studies offer initial support that there are several variables that may predict SCD.

Informed by theoretical considerations, this dissertation focuses on the role of attachment in predicting SCD. According to attachment theory, one's dispositions toward relationships are based on previous experiences with their caregivers (Feeney & Noller, 1996; Fraley & Shaver, 2000; Lee & Hankin, 2009). Such dispositions, in turn, affect the ways in which individuals approach their romantic relationships, such as engaging in limited communication and self-disclosure. Furthermore, past studies have revealed that individuals' attachment may predict SCD. For instance, findings indicated that high levels of anxious and avoidant attachment were negatively predictive of expectations for sexual communication (Machette & Drouin, 2023). In other words, the higher the reported anxiety and avoidance of an individual was, the less they expected to engage in sexual communication with their partner. Additionally, attachment has

also been found to predict sexual self-disclosure negatively (Coffelt & Hess, 2014; Lopez Portillo, 2020). That is, as individuals' anxiety and avoidance attachment levels increased toward higher values, the individuals' reported amount of sexual self-disclosure decreased. Thus, past findings suggest that individuals with a secure (e.g., low levels of anxiety and avoidance) attachment are more likely to engage in sexual self-disclosure with their romantic partner when compared to individuals high in either anxious or avoidant attachment. The same rationale is believed to exist for SCD in that attachment styles may also predict one's SCD.

As SCD represent a violation of one's expectations for sexual communication, this dissertation is also informed by expectancy violations theory (EVT; Burgoon, 1978, 1985; Burgoon & Jones, 1976) for examining the consequences that exist when such violations occur. According to EVT, when one's expectations are incongruent with their experiences, positive or negative outcomes may occur (Bevan, 2003; Burgoon, 1978, 1985). Previous literature has highlighted outcomes such as relational and sexual satisfaction; both concepts have been shown to play important roles in individuals' health and relationships. As such, this dissertation focuses on relational and sexual satisfaction as outcomes that may be predicted by SCD. Furthermore, both concepts have been strongly associated with sexual self-disclosure; by extension, then, they may also be associated with SCD. For example, relational satisfaction is important to one's overall physical and psychological wellbeing (Lebow et al., 2012; Proulx et al., 2007; Robles et al., 2014). Sexual satisfaction is central to one's sexual wellbeing, as it is related to sexual function (Peixoto et al., 2018), sexual frequency (Smith et al., 2011), and sexual self-esteem (Machette & Drouin, 2023; Ménard & Offman, 2009). Therefore, both relational and sexual satisfaction are important relational outcomes that have not only been studied extensively but also continue to attract attention from scholars in an effort to expand our understanding of how

such types of satisfaction may be enhanced. Thus, based on the theoretical foundations of EVT, examining whether and how SCD may predict relational and sexual satisfaction can offer further knowledge on this topic.

Past research has revealed that relationship satisfaction may be predicted by SCD. For instance, a recent study revealed that SCD was positively associated with relationship satisfaction (Machette, 2022a). That is, as SCD scores increased in magnitude toward (higher) positive values, so did individuals' reported relationship satisfaction. In other words, people can be more satisfied in their romantic relationships if their expectations about communicating with their relational partners about sexual topics are met or exceeded. Although this association was correlational, it does offer some initial evidence that SCD and relationship satisfaction are related and that one may be able to predict the other. The literature also reveals that sexual satisfaction may be predicted by SCD. For example, several studies have found that SCD positively predicted sexual satisfaction (Machette & Montgomery, 2022a, 2022b). In other words, sexual satisfaction increased as SCD scores moved towards higher positive scores. Thus, individuals' satisfaction with their sex lives increased if their expectations regarding communication with their partner about sexual topics were met or exceeded. Collectively, then, recent studies offer evidence to suggest that relational and sexual health outcomes may be predicted by SCD.

Despite an increase in academic interest in sexual communication and sexual self-disclosure, including the emerging research concerning SCD, knowledge about the predictors and outcomes associated with SCD remains largely undefined. Research has yet to synthesize the emergent findings regarding SCD and the processes through which individual characteristics may generate SCD and, in turn, how SCD then affect relational and sexual health outcomes.

Therefore, another goal of this dissertation is to test a mediation model in which SCD connects antecedents and outcomes.

Some attempts have been made to model antecedents and outcomes related to sexual communication, more specifically, sexual self-disclosure. For example, the contextual model of sexual self-disclosure (Brown & Weigel, 2018) examines the relational antecedents (e.g., relationship responsiveness, uncertainty) surrounding the decision-making process involved in sexual self-disclosure. Similarly, the sexual self-disclosure decision model (Richards, 2021) focuses on the antecedent role of goals (e.g., a closer relationship) in assessing the costs and benefits associated with sexual self-disclosure. In terms of outcomes associated with sexual self-disclosure, the post-sex disclosures model (Denes, 2018) examines how physiological responses during sexual activity (e.g., the release of oxytocin) influence individuals' engagement in sexual self-disclosure post-sexual activities. Collectively, these models have offered additional insight into the role of individual and relational antecedents in sexual self-disclosure. Yet, each of the models focuses on sexual self-disclosure only, not on SCD. This dissertation study introduces the idea of SCD as a useful concept when examining romantic partners' sexual communication. As the SCD concept is rather new, though, another goal of this dissertation is to assess how SCD compares to sexual self-disclosure when modeling antecedents and outcomes. Thus, this dissertation will also compare SCD and sexual self-disclosure as mediators between antecedent (e.g., attachment) and outcome (e.g., relational and sexual satisfaction) variables.

In sum, this dissertation investigates the antecedents of SCD, guided by attachment theory (Bowlby, 1973, 1980), to examine how attachment predicts SCD within relationships, as the theory recognizes that attachment affects communication behaviors within relationships (Guerrero, 2022), including sexual self-disclosure (Coffelt & Hess, 2014; Davis et al., 2006).

The examination of the outcomes predicted by SCD is guided by EVT (Burgoon, 1978, 1985; Burgoon & Jones, 1976), as the theory states that individuals develop expectations for behaviors within a relationship, that, in turn, may be incongruent with their experience and result in either positive or negative outcomes. As such, the dissertation seeks to assess the predictive relationship between SCD and relational (i.e., relationship satisfaction) and sexual outcomes (i.e., sexual satisfaction). Thus, the development and goals of the mediation model proposed are strongly rooted in social science theories.

The proposed investigation of SCD as a mediator between antecedents and outcomes via a mediation model is important for several reasons. First, the study may offer useful insights for advancing the study of sexual communication. For instance, sexual self-disclosure, a specific type of sexual communication, has been linked to several important outcomes such as relational and sexual satisfaction (Brown & Weigel, 2018), safe sex behaviors (Noar et al., 2004; Widman et al., 2006), sexual function (Gambescia & Weeks, 2020), and relational closeness (Kuang & Gettings, 2021). As it is argued in this dissertation, SCD is also an important component of sexual communication that should be examined that may function in similar ways to sexual self-disclosure. Examining the relationships between several individual factors and SCD could help sexual communication researchers better understand the role of such antecedents in predicting sexual self-disclosure behaviors. An example of the benefits of investigating such relationships is in the realm of sexually transmitted infection prevention, where sexual communication is recognized as one of the best methods of promoting safe sex behaviors (Catania et al., 1994; Noar et al., 2006; Widman et al., 2014). By understanding what prevents sexual communication (which leads to SCD), scholars could better understand why individuals do not discuss condom

use, for instance, with their sexual partners, and potentially develop theoretical models to promote such discussions.

Second, this study will have several theoretical implications. By examining the outcomes predicted by SCD, researchers could better account for the relational and sexual consequences of SCD. Such work may extend communication theories (e.g., EVT; Burgoon, 1978, 1985) into the field of sexual communication, enhancing their utility and heuristic value. This is particularly noteworthy as many studies in sex research, including sexual self-disclosure studies, do not test any theories nor are they rooted in theoretical considerations to inform their design or the proposed relationships they examine (Diamond, 2010a, 2010b; Muise et al., 2018). Thus, this dissertation may also promote the use of communication theory in sexual communication research, and, in turn, assist researchers to develop theoretical lenses for future studies.

Third, this study has practical implications. For instance, understanding the predictive associations between individual characteristics (i.e., attachment) and SCD may help a variety of professionals, including marital and sexual therapists and counselors, sexual educators, and physicians. The importance of sexual self-disclosure is often stated in the clinical literature. However, few studies have examined what traits predict or dissuade sexual self-disclosure from occurring. Therefore, understanding the individual characteristics that may predict sexual self-disclosure can offer valuable application insight for clinical professionals. For example, current clinical literature emphasizes the benefits of sexual self-disclosure, such as improved relational and sexual satisfaction, intimacy, and so on (Badr & Carmack Taylor, 2009; Witting et al., 2008). However, identifying what individual characteristics influence sexual self-disclosure may help professionals pinpoint the reasons why their patients do not engage in sexual self-disclosure with their sexual partners. Understanding how such factors relate to SCD offers insight into the

characteristics that influence expectations and engagement in sexual communication (Machette & Drouin, 2023). Furthermore, recent studies have revealed associations between individual factors and SCD. Understanding such relationships further may help clinical practitioners identify antecedents that predict SCD and be able to better treat their patients. For instance, clinical professionals may elect to encourage clients to express to their partners their expectations for sexual self-disclosure to improve their satisfaction within their relationships. Focusing on individuals' SCD may provide a novel approach to addressing sexual challenges in individuals' relationships (Machette, 2022a).

In sum, this dissertation study aims to extend our understanding of SCD by examining individual characteristics that influence SCD, as well as identifying relational and sexual health outcomes associated with SCD. In other words, the study focuses on the potential role of SCD as mediators in several relationships previously examined in research between antecedents and outcomes in sexual communication, as well as compares the role of SCD with sexual self-disclosure. Whereas this chapter introduced the overall goals of this dissertation, Chapter 2 will reviews relevant literature on antecedents and outcomes associated with sexual self-disclosure, including SCD, as well as the theoretical perspectives that guide this study. Then, each variable included in the proposed dissertation study is presented and reviewed, with a discussion of their associations with sexual self-disclosure and SCD and various relational and sexual health outcomes. Chapter 2 also includes the study's hypotheses and research questions. Chapter 3 describes the method of the dissertation study, explaining the participants, procedure, measures, and analysis plan. Chapter 4 describes the analyses performed to test the hypotheses and answer the research questions proposed. Finally, Chapter 5 discusses the dissertation study's results in

light of previous findings and theory, suggesting several implications and directions for future research.

CHAPTER 2: LITERATURE REVIEW

Defining Sexual Communication

Sexual communication is, without a doubt, an important aspect of individuals' romantic relationships. However, definitions of this term are limited and inconsistent. This may be due to the ambiguity of the term *sex,* itself. Decades of research provide evidence that individuals' characterizations of sex vary greatly. For example, although penile-vaginal intercourse is often agreed upon as being "sex," several studies have revealed that participants are inconsistent in their perception of whether other sexual activities (e.g., oral sex) constitute sex or not (Bogart et al., 2000; Sanders & Reinisch, 1999; Sonenstein et al., 1997). However, such a definition that focuses only on the penile-vaginal aspect is heteronormative in nature and excludes many sexual minorities' behaviors. For example, a same sex couple may consider their behaviors to constitute having sex even though they are not engaging in penile-vaginal intercourse. Furthermore, the connotations associated with the word *sex* often vary, particularly between the biological sexes. Women often associate words that focus on the relationship and intimacy (e.g., love, marriage), whereas men typically associate body-centered words (e.g., breast, vagina) with sex (Bogart et al., 2000; Robinson et al., 1980). To avoid some of the pitfalls that gendered and heteronormative definitions of sex proposed in the literature have, this dissertation will define sex as "any partnered activity designed to elicit at least one partner's physical arousal" (Conley & Klein, 2022, p. 1). With a definition of what constitutes sex in place for the purposes of this study, it is possible to now move on to define sexual communication clearly.

Currently, there are no typologies of sexual communication topics, although there are several studies that have reported a variety of such topics. Some researchers have divided sexual communication topics into twelve categories, such as *sexual behaviors* (e.g., past sexual

experiences), *sexual sensations* (e.g., sensations that one finds sexually arousing), *sexual fantasies* (e.g., the discussion of sexual fantasies), *sexual attitudes* (e.g., attitudes towards various sexual behaviors), *the meaning of sex* (e.g., the meaning of sexual interaction), *negative sexual affect* (e.g., frustrations about one's sex life), *positive sexual affect* (e.g., satisfaction with one's sex life), *sexual concerns* (e.g., issues within one's sex life), *birth control* (e.g., views towards the use of birth control), *sexual responsibility* (e.g., private views of responsibility of sexual behaviors and consequences), *sexual dishonesty* (e.g., how one feels about lying for or about sex), and *rape* (e.g., one's private views on rape; Snell & Quinn-Nilas, 2019; Snell et al., 1989).

In another study examining couples' sexual communication, Coffelt and Hess (2014) performed an exploratory factor analysis on the sexual topics that participants reported discussing. Their findings revealed five factors, including *sexual preferences* (e.g., sexually arousing touch), *positive emotions related to sex* (e.g., satisfaction related to sex), *negative emotions related to sex* (e.g., apathetic feelings towards sex), *challenges related to sex* (e.g., pretending to enjoy sex), and *sexual history* (e.g., past sexual experiences).

Recently, while determining the factors that compose sexual communication discrepancies, Machette and colleagues (2022) also performed a series of exploratory and confirmatory factor analyses that led to categorizing sexual communication topics into four distinct factors: *sexual relationship maintenance* (e.g., discussion on how to improve sex life), *sexual experimentation* (e.g., discussion of sexual fantasies), *sexual issues* (e.g., difficulties experienced during sexual activities), *safe sex* (e.g., using contraceptives). Thus, the literature offers a variety of categories of sexual communication topics. An understanding of these categories will guide this dissertation's conceptualization of sexual communication by

considering the broad scope of topics that can be included when thinking of the concept of sexual communication.

Research has established a variety of definitions of sexual communication. As noted above, throughout this dissertation, sexual communication will be defined as the combination of discussions of various sexual topics with a sexual partner, along with the frequency and quality of such communication (Metts & Cupach, 1989). In this definition, sexual communication includes the discussion of topics such as one's sexual preferences and needs, views towards sex, sexual fantasies and fetishes, past sexual experiences, and more (i.e., sexual self-disclosure; Coffelt, 2021; Machette et al., 2022; Quina et al., 2000). Additionally, this definition notes individuals' perceived frequency of sexual communication taking place within their relationship (Metts & Cupach, 1989). For example, one may perceive that sexual communication takes place often or infrequently within their relationship, given the expectations they have developed about sexual communication in the relationship based on their past experiences and societal norms. Furthermore, the definition of sexual communication also includes an individual's perceptions about the quality of sexual communication with their partner (Metts & Cupach, 1989). This aspect of sexual communication emphasizes the value of the sexual communication that occurs in partners' relationships. For example, one may perceive that sexual communication occurs often within their relationship but neither partner is able to articulate their thoughts or feelings, resulting in low quality communication. With a clear definition of sexual communication provided, the following section details some of the benefits and challenges of this form of communication.

Benefits and Challenges of Sexual Communication

Sexual communication offers relational benefits, including relational satisfaction, which refers to an individual's evaluation of their relationship (Park et al., 2019). Relationship satisfaction is important to one's physical and psychological wellbeing, as past studies have revealed that relationship satisfaction is linked to increased self-rated health and improved mental and physical health (Proulx et al., 2007; Robles et al., 2014). The concept is also one of the most reported benefits of sexual communication. For example, several studies have found that sexual communication predicts relationship satisfaction (Mallory, 2022; Montesi et al., 2013). Sexual communication is more strongly associated with relationship satisfaction than general communication (Jones et al., 2018), which highlights the important influence of sexual self-disclosure on relational wellbeing. Such findings highlight that sexual communication is an important aspect of couples' relational satisfaction, which, in turn, is critical to their wellbeing.

Communication is essential to healthy sexual relationships (Masters & Johnson, 1970). As such, sexual benefits are also associated with sexual communication, including sexual satisfaction, which is defined as "an affective response arising from one's subjective evaluation of the positive and negative dimensions associated with one's sexual relationship" (Lawrance & Byers, 1995, p. 268). Sexual satisfaction has been found to be associated with one's sexual function (Peixoto et al., 2018), sexual frequency (Smith et al., 2011), and emotional intimacy (Rubin & Campbell, 2012; Yoo et al., 2014), highlighting that sexual satisfaction is linked to core aspects of one's sexuality. Sexual satisfaction is also one of the most commonly reported benefits of sexual communication, with several studies reporting that sexual communication predicts sexual satisfaction (Mallory, 2022; Montesi et al., 2013). In addition to the established predictive relationship between sexual self-disclosure and sexual satisfaction, indirect sexual communication, as well as the lack of sexual communication (both of which could indicate

indirect or lack of sexual self-disclosure), negatively predict sexual satisfaction (Theiss, 2011). These findings provide further evidence about the relationship between sexual communication and sexual satisfaction.

Sexual communication also has health benefits, including condom negotiation, which is defined as the process through which sexual partners decide, through discussion, to use a condom during sexual activities such as anal, oral, and vaginal sex (Peasant et al., 2015). This process plays a critical role in predicting safe sex behaviors, as condom negotiation is positively associated with condom use, which can prevent unplanned pregnancy and the transmission of sexually transmitted infections (Catania et al., 1994; Noar et al., 2006; Sheeran et al., 1999; Widman et al., 2014). Unsurprisingly, sexual communication and condom negotiation are closely related, as general sexual communication is predictive of contraceptive use (Widman et al., 2006). Taken together, these findings suggest that sexual communication can lead to condom and contraceptive use even if the topic of safe sex is not discussed. Rather, it is possible that sexual communication in a general sense may lead to later discussions or actions toward safer sex. Such findings demonstrate the significance of sexual communication in promoting condom negotiation and, in turn, safe sex behaviors.

Taken together, past studies suggest there are multiple benefits associated with sexual communication. Past research has documented positive predictive relationships between sexual communication and relational and sexual satisfaction, suggesting that, as sexual communication increases within the relationship, so does one's relational and sexual satisfaction (Mallory, 2022; Montesi et al., 2013). Furthermore, past studies have revealed other benefits of sexual communication, including safe sex practices, with sexual communication being predictive of condom use (Widman et al., 2006).

Although sexual communication boasts several benefits to one's relationship and sex life, discussing sexual topics is often limited, if not avoided, in many relationships (Anderson et al., 2011). Such discussions are often threatening to relational partners due to the inherent vulnerability associated with sexual communication (Afifi & Steuber, 2009; Bute, 2013; Machette et al., 2022; Vangelisti, 1994). This vulnerability stems from the risk of judgment, rejection, or disapproval from one's partner (Brown & Weigel, 2018; Machette, 2022a; Machette & Cionea, 2023; Theiss, 2011; Theiss & Estlein, 2014). As such, there are many challenges associated with sexual self-disclosure.

One of the notable challenges pertains to the perceived threats that sexual communication has in relationships. The existing literature illustrates three types of threats associated with sexual self-disclosure, including threat to self, threat to partner, and threat to the relationship (Rehman et al., 2019; Theiss & Estlein, 2014). The first, threat to self, includes individuals' fear of feeling shame, guilt, or embarrassment when discussing sexual topics with their partner (Metts & Cupach, 1989). Such concerns limit individuals' sharing their sexual preferences, fetishes, and sexual fantasies with their partners due to fear that such conversations may lead to negative feelings and perceived inadequacy (Anderson et al., 2011). The second threat, to one's partner, centers on the concern of causing harm to one's partner by inducing feelings of shame and distrust as a consequence of sexual communication (Metts & Cupach, 1989). Certain sexual topics, such as sexual fantasies and past sexual experiences, are perceived to be threatening to one's partner because these topics may spark jealousy or may be hurtful to a partner's self-esteem (Anderson et al., 2011; Machette & Cionea, 2023). Lastly, individuals avoid sexual communication due to the perceived threat to their relationship (Machette & Cionea, 2023; Rehman et al., 2019). For instance, a common concern of sexual communication within a

romantic relationship is that discussing sexual topics may highlight sexual incompatibility between partners. Furthermore, individuals may be reluctant to engage in sexual communication with their partners due to the potential for conflict within the relationship (Anderson et al., 2011; Machette & Cionea, 2023). As a result, many individuals perceive sexual communication to be a threat to the stability of their relationship (Rehman et al., 2019). Taken together, these threats illuminate why sexual communication is typically avoided in relationships (Anderson et al., 2011; Theiss & Estlein, 2014).

Complicating such insecurities is the taboo nature of many sexual topics. For example, studies report that discussing past sexual partners, fetishes, fantasies, masturbation, and the use of sex toys is typically considered taboo in many relationships (Anderson et al., 2011; Faulkner & Lannutti, 2010; Lo et al., 2009; Machette & Cionea, 2023). Furthermore, despite their increasing popularity and acceptance in mainstream media, sexual fantasies, the use of sex toys, and masturbation remain topics that are not often discussed within relationships (Kraus, 2017; Lehmiller, 2018; Piha et al., 2018). Therefore, the threats associated with sexual communication, along with the overall taboo nature of sexual topics, represent challenges for individuals and often limit the sexual self-disclosure that takes place within romantic relationships.

Scholars have proposed that individuals perform an internal cost/reward assessment before communicating about sexual topics (Brown & Weigel, 2018; Denes, 2018; Herbenick et al., 2019). In this context, costs refer to the perceived negative outcomes that may result from sexual self-disclosure (e.g., judgment from a relational partner; Machette & Montgomery-Vestecka, 2023a), such as negative reactions (e.g., partner disapproving, not understanding, or judging), feeling uncomfortable or embarrassed discussing such topics, protecting a partner's feelings, or concerns about relationship dissolution (Denes, 2018; Fox et al., 2022; Herbenick et

al., 2019). Alternatively, in this context, rewards are the anticipated positive outcomes associated with sexual communication (Machette, 2022a; Machette & Montgomery-Vestecka, 2023a), such as increased sexual satisfaction, the anticipation of increased intimacy, relationship satisfaction, closeness, as well as increased sexual health (Coffelt & Hess, 2014; Hess & Coffelt, 2012; Machette, 2022a; MacNeil & Byers, 2005; Widman et al., 2014; Wincze & Weisberg, 2015).

Given these various factors that can influence an individual's evaluation of sexual self-disclosure, sexual communication may be withheld due to concerns about negative consequences, which may result in sexual communication discrepancies, detailed next.

Sexual Self-Disclosure and Sexual Communication Discrepancies

Sexual self-disclosure has multiple definitions and conceptualizations (Lopez Portillo, 2020). The term is often used in a clinical sense (i.e., disclosing sexual harassment, abuse, or other traumas to a loved one or medical professional; Alaggia, 2005; DiMauro & Renshaw, 2018; Ullman et al., 2010) or in a relational sense (i.e., disclosing sexual preferences, fantasies, and more to a sexual partner; Brown & Weigel, 2018; Coffelt & Hess, 2014; Denes, 2012, 2015; Rehman et al., 2017). However, the goal of the research focusing on either realm of sexual self-disclosure often seeks two different goals, such as medical treatment for victims in clinical sexual self-disclosure or relational impacts of sexual communication in relational sexual self-disclosure. This dissertation will focus on relational sexual self-disclosure, defined, as previously explained, as disclosure to a romantic partner of one's sexual thoughts, feelings, and behaviors (Tang et al., 2013). In other words, sexual self-disclosure involves an individual sharing information related to sexual topics with their partners. Such topics may include one's preferences for the partnered sexual behaviors they engage in (Byers & Demmons, 2010; Machette & Cionea, 2023; Quina et al., 2000; Rehman et al., 2011), sexual challenges that they

face (Herold & Way, 1988; Tang et al., 2013), personal views and beliefs towards sexual morality (Faulkner & Lannutti, 2010; Herold & Way, 1998), one's sexual past (Faulkner & Lannutti, 2010; Machette & Cionea, 2023; Snell, 1989), sexual desires (Coffelt & Hess, 2014; Faulkner & Mansfield, 2002; Machette & Cionea, 2023), their level of sexual satisfaction within their relationship (Snell, 1989), and so on. Thus, sexual self-disclosure captures any sexual topic that is discussed with one's romantic partner.

Conceptually, sexual self-disclosure falls under the umbrella term of sexual communication, as it is related to individuals' communication about sexual topics with their sexual partners. Sexual self-disclosure emphasizes the act of sharing information related to sexuality and sexual behaviors with one's partner. This is different than general sexual communication, which may include general discussions about sexual topics, may not necessarily focus on sharing one's own views, preferences, and so on with one's partner, may involve listening to one's partner more, and so on. Thus, the self-oriented nature of sexual self-disclosure is essential for its conceptualization and for delineating it from other concepts that are included in the broader term of sexual communication, such as SCD, which is detailed next.

A discrepancy is the absence of similarity between two or more things (Machette et al., 2022). Sexual communication discrepancies (SCD) are a relatively new concept in the sexual communication literature. Machette and colleagues defined SCD as the difference between the amount of sexual communication one expects would occur with their partner and the perceived amount taking place in an individual's relationship (Machette, 2022a; Machette & Montgomery-Vestecka, 2023a; Machette et al., 2022). As a reminder, SCD do not measure both partners' perceptions nor do they assess any actual communication behaviors, only perceptions. Conceptually, SCD stem from sexual communication, as they measure the difference between

one's expectations about and the perceived amount of sexual communication that takes place within one's relationship. Furthermore, SCD are closely related to sexual self-disclosure. For example, SCD measure the difference between expectations and perceived sexual communication, with sexual self-disclosure being central to the conceptualization of sexual communication. Therefore, SCD and sexual self-disclosure are closely related.

The concept of SCD has origins in EVT, which suggests that when one's expectations are violated within a relationship, relational consequences typically follow (Burgoon, 1978, 1995). Individuals in a romantic relationship have at least some history with their partner; therefore, they are likely to have somewhat clear and set expectations for future interactions based on the couple's past communication. If individuals have a limited history with their partners, they will likely rely on cultural scripts that guide interactions. Examples of cultural scripts include an individual believing that men should not talk about sexual challenges (e.g., erectile dysfunction) or that women should not openly discuss their past sexual experiences. When such expectations are negatively violated (i.e., a negative expectancy violation has occurred), negative outcomes such as relational conflict may occur (Bevan, 2003; Machette, 2022b). In terms of sexual communication, recent studies suggest that negative expectancy violations are associated with consequences such as reduced relational and sexual satisfaction (Machette, 2022a; Machette & Cionea, 2023).

Behaviors can also violate expectations positively. When expectations are exceeded (i.e., a positive violation has occurred), there are often relational benefits, such as reduced relational uncertainty and increased relationship quality (e.g., satisfaction, trust; Afifi & Metts, 1998). Similar consequences have been proposed concerning expectations for sexual communication, where exceeded expectations (a positive SCD score) have been found to be associated with

positive outcomes, such as increased relational and sexual satisfaction (Machette, 2022a; Machette & Montgomery, 2023; Machette et al., 2022). Thus, one's expectations are key to the construct of SCD, as the concept stems from the theoretical lens of EVT, which emphasizes violated expectations for communication behaviors.

SCD are measured using the Sexual Communication Discrepancy Index (SCDI), which was developed to "extend research on differences in sexual communication by measuring discrepancies in individuals' sexual relationships regarding their expectations for sexual communication" (Machette et al., 2022, p. 3). In other words, SCD are meant to capture any incongruencies that exist between the perceptions of one partner about the level of sexual self-disclosure that takes place in their relationship and the level they expected within their partnership. SCD scores are usually calculated by averaging the items composing each of the two sub-dimensions, and then subtracting the expected communication average score from the perceived actual communication average score, resulting in a final SCD score. Given that SCD are calculated as a discrepancy score, the final SCD can be positive, zero, or negative. When an individual's expected amount of sexual communication within the relationship exceeds their perceptions of the actual amount of sexual communication, the discrepancy score is negative. When perceptions about the amount of sexual communication within a relationship exceed an individual's expectations, the resulting discrepancy is positive (Machette, 2022a; Machette & Montgomery-Vestecka, 2023a; Machette et al., 2022). No discrepancy entails expectations that are perceived to be met in actual communication in the relationship (i.e., a difference score of zero between the two dimensions).

During the development of the SCDI, Machette and colleagues (2022) reviewed the literature on sexual communication, self-disclosure, and human sexuality to generate the

measurement's items. For example, as past literature has highlighted the importance and frequency of conversations about sexual preferences, fantasies, past experiences, and safe sex practices, items were generated to reflect such findings. As a result, 24 statements were created to capture the various aspects of sexual communication that had been detailed in the existing literature (e.g., discussions of sexual views, preferences, challenges). The items were then multiplied into two sets, with one set worded as expected sexual self-disclosure (e.g., "In an ideal sexual relationship, I expect to talk with my partner about…"), whereas the second set was worded to assess the actual sexual self-disclosure that participants perceived took place in their relationships (e.g., "In my current sexual relationship, I talk with my partner about…"). The items were then reviewed by an expert panel of three sexual self-disclosure and human sexuality experts to evaluate the items' face and construct validity (Carpenter, 2018; DeVellis, 2017). Following these experts' suggestions, six items were reworded for better clarity and four new items were added to capture additional aspects of sexual self-disclosure (e.g., orgasm, sexual issues, sexual fetishes).

After finalizing the SCDI measure, Machette and colleagues (2022) collected data to examine the instrument's factor structure via EFA. The analysis yielded four factors. In addition to the EFA, the researchers also collected participant feedback on the initial scale items. Four suggestions appeared frequently in their feedback and captured aspects of sexuality that were not measured with the initial items (e.g., "talk about bringing in additional sex partners", "talk about discomfort during sex", "talk about changes in sex drive", and "talk about getting tested for sexually transmitted infections."), which were all added to the measurement instrument for the next stage of scale development. Next, Machette and colleagues (2022) utilized CFA to confirm the factor structure derived from the EFA results and participants' feedback. After dropping

items whose standardized factor loadings were less than 0.6, as well as allowing the errors between five pairs of items to correlate based on theoretical justifications (Brown, 2015), the CFA revealed that the SCDI possessed good global fit, with good reliability. The four distinct factors structure was confirmed and the final number of items retained for the measure was established—24 items for expected and 24 items for actual sexual communication in individuals' relationships.

The four dimensions of SCD included: 1) sexual relationship maintenance, 2) sexual experimentation, 3) sexual issues, and 4) safe sex. *Sexual relationship maintenance* captures the discussion of sexual topics that assist in maintaining the relationship. Such topics include what feels pleasurable during sex, what arouses one sexually, how the partners reach orgasm and various types of sex. *Sexual experimentation* includes the discussion of opportunities to expand a couple's sex life. Such topics may involve talking dirty, partners' sexual fantasies and fetishes, and the partners' masturbation preferences. *Sexual issues* captures the discussion of sexual challenges, such as issues occurring during sex, negative aspects of the couple's sex life, what is not pleasurable during sex, difficulties with having sex, as well as experiencing pain or discomfort during sex. Lastly, *safe sex* pertains to the discussion of consequences associated with sex as well as the use of contraception. As such, safe sex topics may include using contraception, contraceptive options, and the consequences of unprotected sex (Machette et al., 2022). Taken together, these four dimensions offer an understanding of the conceptual domain of SCD. Such findings pertain to this dissertation, as Machette and colleagues' (2022) conceptualization of SCD will be used in this study.

Modeling Sexual Communication Discrepancies as Mediators

There is emerging literature that provides evidence of individual features that are associated with SCD. For example, individuals' sexual self-esteem, implicit sexual beliefs, and attachment are predictive of their sexual self-disclosure behaviors (Davis et al., 2006; Machette & Drouin, 2022). In this line of research, attachment has been found to be one of the strongest predictors, and attachment theory has provided a theoretical lens to examine attachment's predictive relationship with sexual self-disclosure. Furthermore, recent studies have detailed associations between SCD and relational and sexual health outcomes. For instance, SCD has been found to be associated with relational and sexual satisfaction (Machette, 2022a; Machette & Montgomery, 2022a; Machette & Montgomery, 2022b). Taken together, there is a collection of emerging literature that has documented relationships between the antecedents and outcomes associated with SCD. However, these variables have yet to be examined collectively within one model. Therefore, this dissertation proposes a mediation model in which SCD function as mediators, explaining the direct and indirect effects that antecedent, predictive variables, have on outcomes or consequences of SCD. As there is no previous literature modeling SCD in any way, past work on a similar concept, sexual self-disclosure, offers a helpful starting point in the theorizing of the SCD mediation model. Several scholars have developed models of sexual self-disclosure, detailed in the following section.

A Review of Existing Models of Sexual Self-Disclosure

In recent years, several researchers have proposed and tested various models of sexual self-disclosure. This dissertation reviews three such models that are relevant to the current study as they focus on factors that influence communicative behaviors: the post-sex disclosures model (Denes, 2018), the contextual model of sexual self-disclosure (Brown & Weigel, 2018), and the sexual self-disclosure decision model (Richards, 2021). The following paragraphs explain the

post-sex disclosure model, followed by a description of the contextual model of sexual self-disclosure, and an overview of the sexual self-disclosure decision model. This section concludes by reviewing the limitations of the current models of sexual communication.

Post-Sex Disclosures Model

The first model reviewed is the post-sex disclosures model (PSDM; Denes, 2012, 2018). This model offers a valuable framework for understanding the sexual self-disclosure that takes place immediately after sexual activity, also known as "pillow talk." The PSDM builds on past work on self-disclosure, such as the revelation risk model (Afifi & Steuber, 2009) as well as Altman and Taylor's (1973) social penetration theory. As such, the PSDM focuses on the cost/benefit evaluation of communicating with one's partner and recognizes this internal assessment as an antecedent to individuals' communication behaviors. Specifically, the PSDM proposes that, when individuals assess there are greater benefits and fewer costs to sexual communication, disclosure may be prompted because

> Individuals see disclosure as valuable for promoting individual or relational growth, whereas assessing fewer risks suggests that individuals feel safe disclosing, free from common risks of disclosure such as rejection or a loss of individuality. (Denes et al., 2022, p. 143)

Therefore, the PSDM suggests that individuals will discuss sexual topics with their partners following sexual activity when they evaluate that the benefits to themselves or their relationships outweigh the perceived cost of disclosure.

A unique feature of the PSDM is the recognition of the influence of physiological responses in the communication process. More specifically, the PSDM emphasizes the role of oxytocin in the practice of post-sex communication. As the release of oxytocin is associated positively with feelings of trust and safety and negatively with perceived threats and fear (Kirsch et al., 2005; Kosfeld et al., 2005; Lim & Young, 2006), the PSDM theorizes that

increases in oxytocin (released during sexual activity, and particularly during orgasm) may "create a cognitive state in which individuals perceive a safe disclosure environment" (Denes & Afifi, 2014, p. 337). The PSDM states that such a climate encourages communication about the positive aspects of one's relationship, such as words of love, affection, and intimacy (Denes, 2012). Therefore, the PSDM suggests that the oxytocin that is released during sexual activities may lead to perceptions of a safe disclosure environment. This, in turn, may encourage the individuals to communicate feelings of love and affection, which, ultimately, benefits the relationship (Denes, 2012, 2018; Denes et al., 2022).

Thus, the PSDM offers a useful lens for examining the role of oxytocin in post-sex communication. The model recognizes that physiological responses during sexual activity influence one's cost/benefit evaluation for communication post-sex, with oxytocin encouraging more disclosure. However, there are also limitations to the PSDM, detailed next.

Limitations of the Post-Sex Disclosures Model. The PSDM was created to examine only specific instances of communication—those that take place immediately after sexual activities. As such, the model is limited in its ability to understand and explain sexual communication that takes place outside the post-sex timeframe. This is a limitation because the PSDM cannot assist in understanding important conversations that occur before sexual activities, such as condom negotiation, setting boundaries, and sharing expectations.

Additionally, the PDSM is limited in explaining sexual communication because it was not designed to specifically examine or explain sexual communication behaviors. Rather, the PSDM focuses specifically on general communication behaviors that take place after sexual activity. The communication topics that are often described in the model are not sexual in nature

per se, but rather about the relationship itself, and focus on love, affection, and intimacy (Denes, 2012). Therefore, the PSDM offers a valuable approach to post-sex communication yet has limitations in explaining sexual communication in a more general sense.

Nevertheless, the PSDM informs my proposed thinking about an SCD mediation model as the former model explains how physiological responses during sexual activity influence individuals' judgment in communicating behaviors post-sexual activities. This is valuable for my argument about SCD functioning as a mediator because the PSDM emphasizes the role of antecedents in the evaluation of whether to engage or withhold sexual self-disclosure. In other words, the PSDM provides evidence that individuals are influenced by various factors when deciding to engage in sexual self-disclosure with their romantic partners. Thus, examining the antecedents I propose in this dissertation is consistent with previous approaches adopted in research on sexual self-disclosure.

The Contextual Model of Sexual Self-Disclosure

The second model of sexual self-disclosure reviewed is the contextual model of sexual self-disclosure (CMSSD; Brown & Weigel, 2018). The model provides a framework for understanding sexual self-disclosure within intimate relationships by examining both the relationship and the self-disclosure contexts within the partnership. Additionally, the CMSSD examines how the disclosure context mediates the relationship between the relationship context and sexual satisfaction (Brown & Weigel, 2018). Below is a discussion of the relationship context, which will be followed by an explanation of the disclosure context concepts from the model.

Relationship Context. According to Brown and Weigel (2018), the relational context component of the model consists of four distinct relationship features that "set the stage for the

more immediate sexual self-disclosure context" (p. 203). These features are relationship responsiveness, relational uncertainty, relationship communication quality, and relationship satisfaction.

The first feature, relationship responsiveness, is defined as the degree to which one believes that their relational partner is supportive and attentive to their needs (Brown & Weigel, 2018). Relationship responsiveness is an important aspect of the relational context of the model because the perception of a responsive partner increases one's comfort within the relationship (Brown & Weigel, 2018). This comfort is critical to sexual self-disclosure, as individuals who are comfortable in their relationship typically feel closer and more trusting towards their partners, leading to more disclosure (Clark & Lemay, 2010; Petronio, 2002). As such, Brown and Weigel (2018) propose that higher responsiveness is indicative of more sexual self-disclosure within the relationship context.

The second feature of the relationship context component of the model is relational uncertainty (Brown & Weigel, 2018). Relational uncertainty captures the degree of ambiguity pertaining to the self, partner, and relationship sources (Knobloch & Carpenter-Theune, 2004). Individuals with high levels of relationship uncertainty are less confident in predicting their partners' behaviors, less assured about their own and their partner's involvement in the relationship, and perceive more threats to the relationship compared to individuals who have low levels of relational uncertainty (Knobloch & Carpenter-Theune, 2004; Knobloch et al., 2007; Knobloch & Solomon, 1999). As relational uncertainty can prevent open communication and, in turn, predicts indirect communication (Theiss, 2011), the CMSSD proposes that one's ability to predict their partner's behaviors is critical to sexual self-disclosure (Brown & Weigel, 2018).

Therefore, Brown and Weigel (2018) propose that relational uncertainty negatively influences the relationship context that leads to sexual self-disclosure.

The third feature of the relationship context is relationship communication quality, which refers to partners' perception of the general quality of communication that takes place within their relationship (Brown & Weigel, 2018). Past studies have highlighted the importance of communication quality in relationships. For example, studies have revealed that good communicators are likely to have higher relationship satisfaction compared to poor communicators (Byers, 2005; Montesi et al., 2010). Furthermore, communication is the vehicle that enables romantic partners to understand and make meaning of their relationship (Burgoon & Hale, 1984; Hess & Coffelt, 2012). As such, Brown and Weigel (2018) propose that relationships defined by high-quality communication would be indicative of a more supportive relationship context, which would promote sexual self-disclosure.

The fourth and final feature of the relationship context in the model is relationship satisfaction (Brown & Weigel, 2018). Several studies have linked relationship satisfaction with the other features of the relationship context. For example, the perception of higher levels of relational responsiveness has been positively associated with relationship satisfaction (Clark & Lemay, 2010). Similarly, relational uncertainty has been negatively associated with relationship satisfaction (Knobloch & Theiss, 2011). As noted previously in this document, relationship satisfaction is also significantly associated with relationship satisfaction (Byers, 2005; Montesi et al., 2010). Furthermore, researchers have argued that relationship satisfaction should not only be used as an outcome but rather be recognized as a predictor of relationship processes, such as communication (Greene, 2009; Mark & Jozkowski, 2013; Rusbult et al., 1998). Following this reasoning, Brown and Weigel (2018) suggest that relationship satisfaction serves as an indicator

of the relationship context of the CMSSD and would contribute positively to more disclosure within individuals' relationships.

Disclosure Context. The second area of the CMSSD is the disclosure context. According to Brown and Weigel (2018), this more immediate context of the model captures "one's specific sexual disclosure-related perceptions, concerns, desires, and behaviors occur" (p. 204). The disclosure context of the model consists of the perceived risk and consequences of disclosure, as well as the depth of sexual self-disclosure. Below is an overview of both aspects.

The first feature of the disclosure context of the model is the perceived risks associated with sexual communication (Brown & Weigel, 2018). As detailed earlier in this document, much of the sexual self-disclosure literature focuses on the risks associated with discussing sexual topics with one's partner (e.g., Denes, 2012, 2018; Machette & Cionea, 2022). Similar trends exist in terms of general (non-sexual) disclosure (e.g., Afifi & Steuber, 2009; Solomon & Knobloch, 2004). In all, the existing literature illustrates that individuals commonly withhold the discussion of certain topics (e.g., past sexual experiences, fantasies) to protect their relationships (Denes, 2018; Fox et al., 2022; Guerrero & Afifi, 1995; Herbenick et al., 2019; Machette & Cionea, 2022). More specifically, individuals attempt to protect their relationships by avoiding sexual topics to prevent disapproval and rejection from their partners (Brown & Weigel, 2018; Montesi et al., 2013; Theiss, 2011; Theiss & Estlein, 2014). Therefore, the CMSSD proposes that, if individuals perceived high levels of risks and negative consequences associated with sexual self-disclosure, they would withhold such discussions with their partner (Brown & Weigel, 2018). Alternatively, Brown and Weigel (2018) suggest that if individuals perceived that discussing particular sexual topics would bring positive benefits (e.g., sexual satisfaction), they

would be more likely to participate in sexual self-disclosure potentially to enhance their relationship.

The second feature of the disclosure context in the model is the overall depth of sexual self-disclosure that occurs (Brown & Weigel, 2018). The model predicts that individuals take cues from the relational context (i.e., relationship responsiveness, relational uncertainty, relationship communication quality, and relationship satisfaction), and from the perceived risks and consequences of sexual self-disclosure to determine the depth of sexual self-disclosure in which to engage. For example, if an individual perceives their partner to be responsive and their relationship to be satisfying, stable, and entailing good communication, they would be more likely to initiate sexual self-disclosure than if they felt their partner was not responsive to their needs and their relationship was not satisfying, was unstable, or entailed poor communication. Moreover, such an individual would also evaluate the risks and consequences they perceived to be associated with sexual self-disclosure. If these perceived consequences were negative, the individual would be less likely to engage in sexual self-disclosure compared to if the consequences were perceived to be positive. The model suggests that individuals then adjust the depth of their sexual self-disclosure, depending on the assessment described above (Brown & Weigel, 2018).

Sexual Satisfaction. The final area of the CMSSD is the concept of sexual satisfaction, which captures the degree to which an individual is satisfied or happy with the sexual aspects of their relationship (Sprecher & Cate, 2004). Several studies have demonstrated a significant relationship between sexual self-disclosure and sexual satisfaction (Byers, 2005; Byers & Demmons, 1999; Lawrance & Byers, 1995; MacNeil & Byers, 2005, 2009; Montesi et al., 2010; Rehman et al., 2011; Theiss, 2011; Theiss & Estlein, 2014). As such, the model predicts that a

positive relationship and disclosure contexts predict increased sexual satisfaction (Brown & Weigel, 2018).

Limitations of the Contextual Model of Sexual Self-Disclosure. The CMSSD offers a framework for understanding and predicting the contexts that surround sexual self-disclosure. The model suggests that positive relationship contexts (e.g., high levels of relationship responsiveness, relational certainty, communication quality, relationship satisfaction) are associated with a positive disclosure context (e.g., perceived positive consequences and low risks associated with sexual communication, greater depth of sexual communication). Furthermore, the model predicts that both relationship and disclosure contexts predict sexual satisfaction (Brown & Weigel, 2018). However, there are limitations to the CMSSD too. Mainly, the model does not explicitly account for individual characteristics that may influence sexual self-disclosure. For example, past studies have revealed that individual factors, such as one's attachment style, are directly associated with sexual self-disclosure behaviors (Davis et al., 2006; Machette & Drouin, 2022). In other words, individuals higher in avoidance attachment are less likely to participate in sexual self-disclosure compared to those who are lower in avoidance (Davis et al., 2006). Therefore, although the relational and disclosure factors within the CMSSD offer insight into sexual self-disclosure, the model does not account for individual factors, which are the most immediate context associated with sexual self-disclosure behaviors (Brown, 2018).

Nevertheless, the CMSSD (Brown & Weigel, 2018) informs my proposed mediation model argument in several ways. First, the CMSSD suggests that individuals determine the depth of sexual self-disclosure in which to engage based on various cues within their relationship. In other words, the perceived risks and consequences of sexual self-disclosure influence the amount of sexual self-disclosure in which an individual elects to engage. Furthermore, the CMSSD

(Brown & Weigel, 2018) emphasizes the sexual health outcomes associated with sexual self-disclosure. For instance, the CMSSD suggests that sexual satisfaction is predicted by one's sexual self-disclosure context, which leads to engaging in sexual self-disclosure behaviors. Thus, the CMSSD highlights both the role of antecedent factors that influence one's engagement in sexual self-disclosure behaviors (which may contribute to SCD), as well as the sexual health outcomes (e.g., sexual satisfaction) predicted by sexual self-disclosure behaviors. In other words, the model presents an argument in favor of the same structure adopted for my proposed mediation model that captures antecedents and outcomes.

The Sexual Self-Disclosure Decision Model

The third and final model reviewed is the sexual self-disclosure decision model (SS-DDM; Richards, 2021). The model builds on biological and cognitive psychology to predict the factors that contribute to individuals' sexual communication behaviors. The SS-DDM is made up of a three-phase disclosure decision process that examines the antecedents, assessment, and decision itself (Richards, 2021). Below is a discussion of the antecedent phase, which will be followed by explanations of the assessment and decision phases.

The first phase of the SS-DDM is the antecedent phase (Richards, 2021). This phase focuses on the internal factors that stem from the central nervous system, such as motives and goals. In the context of the SS-DDM, motives are higher order needs (Elliot, 1999, 2006), which include the need to connect with other individuals (Baumeister & Leary, 1995; Deci & Ryan, 2000). Richards (2021) views communication as goal-oriented and influenced by the desire to obtain a positive outcome (e.g., a closer relationship) or avoid a negative outcome (e.g., rejection). As such, the SS-DDM incorporates the behavioral activation system (BAS) and the behavioral inhibition system (BIS) to distinguish between positive and negative motives. The

BAS and BIS explain goals as desired end states (Elliot, 2006; Palomares, 2014), which can be divided into approach and avoidance goals (Elliot, 2006; Elliot & Gable, 2019). For example, a positive end goal is recognized as an approach goal, whereas avoiding a negative end state is considered an avoidance goal (Gable, 2012, 2013, 2015). Through the lens of the SS-DDM, these approach and avoidant goals influence individuals' assessment of sexual self-disclosure, detailed below.

The second phase of the SS-DDM is the assessment phase, which consists of one's disclosure efficacy and outcome assessment (Richards, 2021). Building on past communication research (e.g., Afifi & Steuber, 2009; Altman & Taylor, 1973; Greene, 2009), the SS-DDM argues that individuals will not communicate if they do not perceive they have the skills to do so. The model suggests that, if an individual perceives that they can effectively communicate information, they are likely to communicate (Richards, 2021). The assessment phase also includes one's outcome assessment (i.e., the individual's assessment of the interaction). In the SS-DDM, expected outcomes can be positive or negative, and result from disclosure (Richards, 2021). Reflective of the literature reviewed previously in this document, the model suggests that expected outcomes pertain to the self, partner, and the relationship. Richards (2021) proposes that after efficacy and outcomes are assessed, the individual moves to the decision phase of the SS-DDM.

In the final phase of the SS-DDM, the decision phase, individuals are assumed to be rational decision-makers (Kahneman, 2003; Richards, 2021). Therefore, the model proposes that individuals are aware of their abilities to communicate, as well as their desire to "maintain or enhance themselves, their partner, and their relationship rather than reducing or hurting themselves, their partner, and the relationship" (Richards, 2021, p. 8). As such, the SS-DDM

proposes that individuals who perceive more positive than negative outcomes will engage in sexual self-disclosure.

In sum, the SS-DDM builds on biological and cognitive psychology to examine the process of determining whether to engage in sexual self-disclosure or not. The model proposes that an individual's approach and avoidant goals guide their assessment of sexual self-disclosure (Richards, 2021). As such, the SS-DDM suggests that individuals evaluate their disclosure efficacy and any perceived outcomes associated with sexual self-disclosure, which ultimately leads to an individual determining whether or not to engage in sexual self-disclosure (Richards, 2021).

Limitations of the Sexual Self-Disclosure Decision Model. The SS-DDM offers a clear, three-phase process of sexual self-disclosure evaluation. However, the limitations of the model should also be noted. The SS-DDM focuses primarily on the individual goals that influence the evaluation of sexual self-disclosure, which is illustrated in the antecedent phase of the model. This is a limitation to our understanding of the predictors of sexual self-disclosure, as goals are inherently fluid and dependent on a specific place and time within a relationship (Impett et al., 2008). In other words, an individual may have a short-term goal of appearing open-minded to their new partner, which leads them to engage in sexual self-disclosure. However, that same individual may adjust their goals (e.g., protect their sexual secrets) shortly after having engaged in sexual disclosure, and thus, changing their approach to sexual self-disclosure. Conversely, a more stable individual characteristic, such as attachment, is likely to remain relatively constant in predicting one's sexual self-disclosure behaviors. As such, the SS-DDM is limited in its utility to explain more stable predictors of sexual self-disclosure within romantic relationships.

Nevertheless, the SS-DDM helps my theorizing about a mediation model between antecedents and outcomes through SCD by highlighting that individual characteristics may influence one's approach to sexual communication. While the SS-DDM focuses on individuals' goals as antecedents, this dissertation focuses on attachment, which is ultimately hypothesized to predict sexual communication behaviors (e.g., SCD and sexual self-disclosure), as well as relational and sexual health outcomes (e.g., relational and sexual satisfaction). Therefore, the SS-DDM highlights the role of individual characteristics as antecedents of sexual communication behaviors, which in turn, may mediate the established relationships between the antecedents and outcomes of this study.

Limitations of Existing Models of Sexual Self-Disclosure

Taken together, the existing models of sexual self-disclosure contribute to our understanding of the physiological, relational, biological, and cognitive influences on sexual communication. First, the PSDM (Denes, 2018) explains how physiological responses during sexual activity, such as the release of oxytocin, influence individuals' judgment in communication behaviors post-sexual activities. Second, the CMSSD (Brown & Weigel, 2018) emphasizes the relational context surrounding the decision-making process related to engagement in sexual communication. Finally, the SS-DDM (Richards, 2021) focuses on the role of motives and goals in assessing the costs and benefits associated with sexual communication. Collectively, the existing models offer various nuanced understandings of how and why sexual self-disclosure may occur within romantic relationships. With these contributions in mind, it should also be noted that none of the existing models explain SCD (Machette, 2022a; Machette et al., 2022).

Modeling SCD further beyond current studies is needed in the field of sexual communication. SCD serve as an indicator of whether individuals' expectations for sexual communication are met, unmet, or exceeded within their relationships (Machette & Montgomery, 2022a; Machette et al., 2022). With emerging literature revealing that SCD are associated with relationship satisfaction (Machette, 2022a), sexual satisfaction (Machette, 2022a; Machette & Montgomery, 2022a), sexual intimacy (Machette, 2022a), and female sexual function (Machette & Montgomery, 2022a), it is evident that SCD have a direct impact on individuals' daily lives. Consequently, testing SCD further as a mediator offers the opportunity to advance the study of sexual communication, which itself has been linked to numerous important outcomes, such as relational and sexual satisfaction (Brown & Weigel, 2018), safe sex behaviors (Noar et al., 2004; Widman et al., 2006), sexual function (Gambescia & Weeks, 2020), and relational closeness (Kuang & Gettings, 2021). Additionally, this dissertation study in which SCD is connected to both antecedents and outcomes based on two central theories may help extend communication theories (e.g., EVT; Burgoon, 1978, 1985) into the field of sexual communication, enhancing their utility and heuristic value in an academic subfield that is often atheoretical in study design (Diamond, 2010a, 2010b; Muise et al., 2018). Finally, the proposed mediation design may help a variety of professionals, including marital and sexual therapists and counselors, sexual educators, and physicians in identifying the reasons why their patients do not engage in sexual self-disclosure with their sexual partners and helping them avoid the development of or remedy the consequences of SCD in relationships. The following section describes the proposed mediating role of SCD in detail.

A Mediation Model of Sexual Communication Discrepancies

This study expands on existing models of sexual communication by incorporating the concept of SCD. To examine whether an individual will experience SCD, the direction of the SCD (negative, positive, or neutral), and the outcomes associated with SCD, the proposed mediation model is divided into three distinct sets of variables: antecedents, SCD, and outcomes. The antecedent variables identify individual factors (i.e., attachment styles in this case) that are expected to predict SCD. The mediator is the new concept of SCD. Finally, outcomes capture the outcomes associated with the existence of SCD, specifically relational (i.e., relationship satisfaction) and sexual health (i.e., sexual satisfaction) outcomes. Conceptually, then, this is a mediation model (albeit broken down into several specific mediation relationships) that connects antecedents and outcomes, through SCD.

Antecedent Variables

Scholars have noted that much of the sexual communication literature focuses on outcomes associated with sexual self-disclosure, as opposed to antecedents of such behaviors (Machette & Drouin, 2023). Yet, it is critical to understand what leads to the emergence of SCD. In other words, by examining the behaviors that may serve as antecedents of SCD, scholars and practitioners may better advise individuals about engaging (or not) in such behaviors or may be able treat, clinically, behaviors that lead to SCD. For example, examining one's attachment style and its predictive relationship with SCD may reveal that one's attachment may make them prone to developing SCD. Thus, being able to identify such antecedents would allow scholars and practitioners to help individuals recognize and overcome such barriers within their romantic relationships.

The antecedents of SCD are the concepts that are expected to predict SCD. Individuals' unique features are central to their sexual communication behaviors (Brown, 2018). Specifically,

scholars have frequently demonstrated that one particular set of individual characteristics, attachment styles, are important to sexual self-disclosure behaviors, as attachment is predictive of sexual self-disclosure (Coffelt & Hess, 2014; Davis et al., 2006; Lopez Portillo, 2020). Similarly, attachment theory has often been used to examine the relationship between attachment and sexual self-disclosure, as the theory offers a lens to understand how one's disposition toward others relates to their willingness to engage in sexual self-disclosure. Consequently, this dissertation study recognizes the role of individuals' attachment styles in sexual self-disclosure, as guided by the theoretical lens of attachment theory (Bowlby, 1973, 1980). While attachment is one of the most prominent theories in psychology, it also offers a valuable approach to understanding communication behaviors, as the theory predicts that one's disposition towards their relationship influences their communication behaviors (e.g., disclosure) within the relationship in order to control the levels of closeness between themselves and their relational partner. To understand the role of attachment in sexual communication, the basic concepts of the theory will be reviewed in what follows.

The core concept in attachment theory is that of attachment. Bowlby (1973) defined attachment as the tendency for humans to form strong affectional bonds to differentiated others. The theory suggests that, over time, an individual develops dispositions towards relationships based on previous experiences with their caregivers. Such dispositions are known as attachment styles (Feeney & Noller, 1996; Fraley & Shaver, 2000; Lee & Hankin, 2009). One's attachment style serves to protect them from danger by ensuring that they maintain closeness to supportive others. It remains active and relatively stable throughout their entire life span (Bowlby, 1982; Eagle, 2011; Hazan & Zeifman, 1999).

Although attachment styles were originally examined to understand how children reacted when separated from their mothers (see Ainsworth, 1969), researchers have applied attachment styles to adult romantic relationships (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987). For example, Hazan and Shaver (1987) posited that any variations in one's relationship will produce enduring alterations in their approaches to interactions. Therefore, researchers recognized that one's attachment style influenced their behaviors well beyond childhood. An adult's attachment style guides their disposition in that individuals typically approach all their relationships within their lifetime, as well as their behaviors within such relationships, in ways that are consistent with their attachment style. For example, a highly avoidant individual would likely avoid reliance on others, regardless of relationship type. As such, they would likely avoid behaviors such as self-disclosure throughout their relationships to maintain a comfortable emotional and psychological distance between themselves and their relational partners. Therefore, one's attachment style plays a central role in understanding individuals' relational behaviors.

Attachment styles are typically divided into two broad dimensions (Bartholomew, 1990; Fraley et al., 2000; Griffin & Bartholomew, 1994). The first dimension is anxiety, which is "the degree to which individuals worry about being underappreciated or abandoned by their romantic partners" (Simpson & Rholes, 2017, p. 21). Anxious individuals typically hold hopeful views of their romantic partners, while holding negative views of themselves (Collins, 1996; Hazan & Shaver, 1987). This tension causes such individuals to worry about losing their partner and to question their worth in a relationship (Cassidy & Berlin, 1994). As a result, individuals high in anxiety typically have a poorly adjusted and less satisfying relationship compared to individuals low in anxiety, who are more secure in their relationships and do not have chronic concerns

about their partnerships (Feeney, 2016). The second dimension is avoidance, which is the "degree to which individuals are comfortable with closeness and emotional intimacy in relationships" (Simpson & Rholes, 2017, p. 20). Within relationships, avoidant individuals typically attempt to create and maintain autonomy, independence, and control (Carvallo & Gabriel, 2006; Collins & Feeney, 2000; Mikulincer, 1998). For individuals who are high in avoidance, psychological or emotional closeness with their partners is undesirable or impossible (Simpson & Rholes, 2017). In contrast, individuals who are low in avoidance are typically comfortable with intimacy and codependence (Simpson & Rholes, 2017).

Furthermore, individuals high in avoidant attachment are less likely to desire closeness with their partner, resulting in the avoidance of disclosure and other behaviors that assist in the development of emotional and psychological intimacy between partners (Coffelt & Hess, 2014; Feeney et al., 2000; Lopez Portillo, 2020; Machette & Drouin, 2023). In addition, an individual high in anxious attachment will likely desire reassurance from their relational partner, due to the anxiety associated with the relationship that stems from their own negative views about themselves (Lopez Portillo, 2020; Pietromonaco & Beck, 2015). Therefore, such an individual may attempt to engage in behaviors that build closeness and intimacy, such as disclosure, to assure themselves of their partner's feelings towards themselves and the relationship (Guerrero, 2022; Lopez Portillo, 2020). As such, these findings suggest that one's attachment can directly influence one's behaviors within their romantic relationship.

A central element of attachment theory is communication. It is communication that causes attachment styles to develop over time (Guerrero, 2022). As young children communicate with their caregivers, the interaction forms children's attachment styles (Ainsworth & Bowlby, 1991). For example, if a child's caregiver is often inconsistent in their parenting, the child is

likely to develop an anxious attachment style that will remain with them throughout their lifetime. Alternatively, if a child's caregiver does not often show emotional care or responsiveness to the child's needs, the child will likely develop an avoidant attachment style that will also persist throughout their lifetime. Furthermore, communication is also a consequence of one's attachment style (Guerrero, 2022). That is, one communicates with another person based on their own perceptions of themselves and others (i.e., their attachment style). As such, one area of research in which attachment has been applied extensively is relational communication. Several studies have revealed that a secure attachment style was associated with more expressive communication (e.g., expressions of love and happiness), as well as appropriate self-disclosure (Feeney, 1999; Feeney et al., 2000). In contrast, a synthesis of the literature reveals that individuals with a fearful or dismissive attachment style were found to be more likely to engage in low levels of affectionate communication (Dillow et al., 2014; Hesse & Trask, 2014). Therefore, past studies have corroborated the core ideas of attachment theory in that one's attachment style influences their communication behaviors within their romantic relationship.

Just as individuals' attachment styles influence their general relational communication, this study proposes that attachment also affects sexual self-disclosure. Sexual self-disclosure is a specific type of communication, related to general communication in many ways. As past studies have used attachment theory to examine associations between attachment and both expressive communication and disclosure, this study applies the theory within the realm of sexual self-disclosure to examine if similar relationships exist between attachment and sexual self-disclosure behaviors. For instance, one's attachment style pertains to their relations with others. For adults, romantic relationships are one of the core ways of relating to other individuals. Moreover,

sexuality and intimacy are key in romantic relationships. Therefore, if attachment helps us understand how we relate to others, it should also assist in understanding how individuals relate to their romantic and sexual partners based on their predispositions. One's attachment may encourage or discourage sexual self-disclosure, yet the sexual self-disclosure taking place in individuals' relationships may not meet their expectations, influenced by their attachment. For example, an avoidant individual may not expect to discuss sexual topics with their partner in an attempt to limit emotional closeness within the relationship. Similarly, a highly anxious individual may perceive sexual self-disclosure as extremely threatening to the relationship and, therefore, elect to not engage in such discussions with their partner. As expectations for sexual communication are central to SCD, attachment may then serve a critical role in understanding individual traits and SCD.

The individual characteristics selected in this study consist of anxious and avoidant attachment. These concepts were selected as they are the central concepts in attachment theory, which guides this study. In addition, literature has demonstrated that these concepts are two of the strongest predictors of sexual self-disclosure behaviors (Machette & Drouin, 2023; Oattes & Offman, 2007). Below is an overview of each concept and how they relate to sexual self-disclosure and SCD.

Anxious Attachment. Attachment theory suggests that individuals with high levels of anxious attachment typically have negative self-perceptions but have positive perceptions of others. Such views of themselves and others may directly influence their behavior within relationships. For example, anxiously attached individuals often fear living without their partner and may often seek approval from their partners as they greatly value their relationship (Cassidy & Berlin, 1994; Pietromonaco & Beck, 2015). This anxiety, in turn, may cause the individual to

worry about their relationship often. As such, an anxious attachment style also affects individuals' communication behavior. One example is that anxiously attached individuals are likely to avoid communicating feelings of love, pride, and happiness compared to those who are securely attached (Feeney, 1999; Guerrero, 2022). These behaviors may be in response to their own feelings that their partner does not value them or the relationship as much as they value their partner or the relationship. Thus, there is empirical evidence that avoidant attachment influences behavior and communication within relationships.

Past work that has applied attachment theory to sexual communication suggests that high levels of anxious attachment also influence sexual self-disclosure. For example, anxiously attached individuals communicate their sexual needs less than more secure individuals (Davis et al., 2006). It may be that anxiously attached individuals perceive sexual self-disclosure as too risky to their relationship. For example, Coffelt and Hess (2014) reported that, when individuals showed anxious attachment related behaviors (e.g., distrust in their partners), they perceived sexual self-disclosure as a source of harm to their relationship. Recent studies support such findings, as high levels of anxious attachment were negatively associated with sexual self-disclosure (Lopez Portillo, 2020). Moreover, a synthesis of the literature reveals that anxious individuals may prefer to err on the side of listening, as opposed to speaking, during sexual communication with their partner, to develop secure feelings of trust and closeness (Lopez Portillo, 2020; Miller & Kenny, 1986; Sprecher & Treger, 2015). Thus, research has found support for attachment theory's propositions in that anxiously attached individuals have been found to be more likely to perceive sexual self-disclosure as harmful and to elect to limit such disclosure within their relationships.

Guided by attachment theory and building on such findings, this dissertation proposes that anxious attachment will predict SCD. Attachment theory posits that anxiously attached individuals desire closeness within their relationships (Cassidy & Berlin, 1994). A common method of developing closeness within a relationship is through self-disclosure. This is particularly true for sexual self-disclosure, as disclosing sexual information to one's romantic partner has been found to be positively related to relational closeness (Coffelt & Hess, 2014). However, anxiously attached individuals also fear rejection from their partners. This fear may be magnified when engaging in sexual self-disclosure as such communication is often perceived to be threatening to romantic partners (Anderson et al., 2011; Brown & Weigel, 2018; Theiss, 2011; Theiss & Estlein, 2014). Therefore, anxiously attached individuals may develop expectations about sexual communication in their relationship, based on fear of sexual communication and the risks is poses, which may impede their engagement in such communication. Thus, this fear to engage in sexual communication may lead to low expectations for engaging in sexual communication. However, with such low expectations being set, if one's partner elects to engage in sexual communication, the highly anxious individuals' expectations would be exceeded, resulting in positive SCD. Based on these considerations, the first hypothesis proposed is:

H1: The anxious attachment style will positively predict sexual communication discrepancies.

Avoidant Attachment. Attachment theory also suggests that individuals with high levels of avoidant attachment typically have positive self-perceptions but have negative perceptions of others. Just as with anxious attachment, the perceptions of self and others that characterize avoidant attachment influence one's behavior within their relationships. For instance, individuals high in avoidant attachment are typically uncomfortable with relational closeness and prefer to

maintain emotional distance (Lopez Portillo, 2020; Simpson & Rholes, 2017). This predisposition for relational independence also affects their communication behavior. Individuals high in avoidant attachment usually exhibit low levels of affectionate communication (Dillow et al., 2014; Hesse & Trask, 2014). Similarly, a synthesis of the literature reveals that highly avoidant individuals typically have inadequate communication patterns (Ainsworth et al., 1978; Lopez Portillo, 2020). Such individuals often engage in communication practices that prevent them from developing emotional closeness, such as withdrawing from conversations. These types of behaviors may also take place in respect to their sexual self-disclosure, a communication behavior that is strongly associated with relational closeness and intimacy (Byers, 2005; Coffelt & Hess, 2014; Hess & Coffelt, 2012; Kuang & Gettings, 2021). Collectively, the literature guided by attachment theory suggests that avoidant attachment influences behavior and communication within relationships.

Past work has also applied attachment theory to sexual communication to examine how avoidant attachment influences sexual self-disclosure. Attachment theory suggests that an avoidant disposition impedes individuals in romantic relationships from perceiving that the benefits of sexual communication outweigh the risks of such communication, as the risk of becoming too close to another individual is more salient. In other words, while an avoidant individual may recognize that sexual communication could lead to higher sexual satisfaction, they would likely place a greater emphasis on the risks associated with sexual communication, such as being vulnerable in front of their partner, which ultimately dissuades expectations for sexual communication. Studies in sexual self-disclosure support this theory, as highly avoidant attachment has been negatively associated with expectations for sexual self-disclosure (Machette & Drouin, 2023). In other words, the more avoidant an individual's attachment was, the less they

expected to engage in sexual self-disclosure with their romantic partner, likely due to the perceived risk of disclosing personal information. Other studies have found high avoidant attachment to be positively associated with inhibited sexual communication (Davis et al., 2006), meaning individuals high in the avoidant attachment style suppressed their sexual communication. A theoretical explanation for such findings is that individuals high in this attachment style avoid engaging in disclosure activities to limit feelings of vulnerability and closeness with their relationships (Lopez Portillo, 2017). Therefore, such individuals elect to engage in sexual self-disclosure less than non-avoidant individuals to mitigate relational closeness, as sexual communication is strongly associated with relational closeness (Byers, 2005; Kuang & Gettings, 2021).

Guided by attachment theory, past research offers several insights into how avoidant attachment influences sexual self-disclosure. A highly avoidant individual would likely avoid sexual self-disclosure to keep emotional distance from their partner. Similarly, the avoidant attachment style might also influence SCD, given that it is negatively associated with both expectations for, and engaging in, sexual self-disclosure. As such, an individual high in avoidant attachment is likely to expect to discuss sexual topics less than someone low in avoidance (Coffelt & Hess, 2014; Davis et al., 2006; Machette & Drouin, 2023), as sexual self-disclosure is a highly intimate form of communication that such individuals typically avoid given its potential for vulnerability. However, sexual self-disclosure is a dyadic interaction between romantic partners, in which one's partner may engage in such discussions more or less frequently than one expects. For instance, a highly avoidant individual may have a partner who wishes to engage in sexual self-disclosure more often than the former individual expected. Therefore, one's own expectations about sexual communication may be matched, unmet, or exceeded compared to the

amount of sexual self-disclosure taking place within their relationship, which can lead to the development of SCD as highly avoidant individuals would not expect sexual communication to occur in their relationship but it may, anyway. In other words, as avoidant attachment is negatively predictive of expectations for sexual communication (Machette & Drouin, 2023), avoidant individuals would set low expectations for such communication within their relationship. However, with such low expectations being set, if their partner elects to engage in sexual communication, the avoidant individuals' expectations would be exceeded, resulting in positive SCD. In light of these considerations, the following hypothesis is advanced:

H2: The avoidant attachment style will positively predict sexual communication discrepancies.

Outcome Variables

Recent studies have revealed that SCD are predictive of various outcomes, including relational and sexual satisfaction (Machette, 2022a; Machette & Montgomery-Vestecka, 2023a), sexual function (Machette & Montgomery-Vestecka, 2023b), or sexual intimacy (Machette, 2022a). The existing literature on sexual communication has revealed two primary outcomes that are of utmost interest, and will, therefore, be used in this dissertation as well: relational and sexual satisfaction. The following presents a detailed explanation of relational satisfaction, followed by a detailed explanation of sexual satisfaction.

Relational Outcomes. This study recognizes the relational impact that occurs when one's experiences are incongruent with their expectations. The examination of relational outcomes (i.e., relational satisfaction) is guided by the theoretical lens of EVT (Burgoon, 1978, 1985; Burgoon & Jones, 1976). EVT was originally developed to explain nonverbal behaviors, such as violations of personal space and distance between interactants (Burgoon, 1978; Burgoon

& Jones, 1976). The theory has undergone substantial changes since its initial formulation and has been expanded to examine violations of various types of communicative expectations, whether verbal or nonverbal (Burgoon, 1995; Littlejohn et al., 2021).

The central tenet of EVT is that everyone enters interactions with various expectations based on the relationship with the other person, the context in which the interaction occurs, and prior interactions with that same person (Burgoon, 1978, 1995; Littlejohn et al., 2021). According to EVT, when a violation of expectancies occurs, an individual's interest and attention are aroused. After arousal occurs, the individual interprets the violation to evaluate the meaning of the behavior (Burgoon, 1995). This evaluation of behavior is then assigned either a positive or negative valence (Burgoon, 1978; Littlejohn et al., 2021). Positively valenced violations are the result of communication behaviors that are deemed to be more positive than expected. Conversely, violations that are assigned a negative valence are the result of behaviors that are evaluated to be more negative than expected. Factors that may affect the valence assigned include the communicator's reward valence, which factors in the context in which the interaction took place (e.g., the cultural influence and social situation that surrounds the communication behaviors), the relationship between interactants (e.g., friends, romantic partners, colleagues, strangers), as well as the communicator's characteristics (e.g., age, ethnicity, biological sex, appearance, personality).

Past scholarship has used EVT to understand the relational consequences of positive and negative expectancy violations. For example, within romantic relationships, individuals develop a history with their partners and develop expectations about their partners based on their previous interactions with them. As such, when a partner acts unexpectedly and violates one's expectations, if the valence assigned to such violations is negative, then negative relational

outcomes (e.g., conflict and dissatisfaction) may occur (Bevan, 2003; Burgoon, 1995; Machette, 2022b). Recent research has also applied EVT to sexual self-disclosure (Machette, 2022a, 2022b; Machette & Montgomery-Vestecka, 2023b), finding that, when individuals' expectations were unmet, their relational satisfaction decreased (Machette, 2022a). Therefore, EVT guides this study's focus on SCD, as the theory focuses on discrepancies in expectations, which SCD measure as well given the measure captures discrepancies between one's expectations for sexual communication and the perceived amount of sexual communication that takes place within one's relationship. Thus, there is a natural overlap between the theory and the concept of interest, SCD.

In sum, this study recognizes that SCD plays an important role in predicting relational outcomes. For this dissertation, the relational outcome examined is relationship satisfaction. This concept was selected as past research has highlighted that sexual self-disclosure is a strong predictor of relationship satisfaction (Coffelt & Hess, 2014; Kuang & Gettings, 2021). As such, this study builds on existing literature to propose that similar associations will exist between these concepts and SCD. The following is a detailed overview of relational satisfaction.

Relational Satisfaction. Relational satisfaction is defined as an individual's evaluation of their relationship (Park et al., 2019). As noted earlier in this dissertation proposal, relational satisfaction is important to one's mental and physical health (Proulx et al., 2007; Robles et al., 2014), making it a key aspect of one's relational wellbeing. Furthermore, as detailed above, there have been several studies illustrating the association between sexual self-disclosure and relational satisfaction. For example, numerous studies from a variety of academic disciplines have found that sexual self-disclosure positively predicted relational satisfaction (Coffelt & Hess, 2014; Denes, 2012; Montesi et al., 2010). The predictive relationship between the two concepts was consistent across relational types, including casual (Denes, 2012), dating (Denes, 2012;

Machette & Cionea, 2023), and married couples (Coffelt & Hess, 2014; Hess & Coffelt, 2012). Thus, the association between sexual communication and relational satisfaction is an important one to examine.

Compared to sexual self-disclosure, there have been far fewer studies that have examined the connection between SCD and relational satisfaction. However, recent research has begun to explore these associations. For example, a recent study has found that SCD and relational satisfaction were positively associated (Machette, 2022a), which suggests that, when individuals' SCD scores increased (i.e., higher and higher positive values), their relational satisfaction also increased. Furthermore, several studies have found that relational satisfaction and sexual satisfaction were strongly positively correlated (Byers, 2001; Machette, 2022a). As SCD has also been found to be strongly positively associated with sexual satisfaction, such associations serve as initial evidence that SCD should be predictive of relational satisfaction given that it predicted other variables correlated with this type of satisfaction. Although existing research on SCD and relational satisfaction is scarce, it does offer preliminary support for the expected relationship between the two concepts. Past studies on sexual communication, as well as theories such as EVT (Burgoon, 1978, 1985; Burgoon & Jones, 1976), also suggest that SCD would predict relational satisfaction. As such, the following hypothesis is proposed:

H3: SCD will predict relational satisfaction positively.

Sexual Health Outcomes. This study also acknowledges the impact of discrepancies in one's expectations on sexual health outcomes. The examination of sexual outcomes is also guided by the theoretical lens of EVT (Burgoon, 1978, 1985; Burgoon & Jones, 1976). As noted previously, when an individual's partner acts unexpectedly and violates an individual's expectations negatively, negative outcomes (including outcomes related to sexual health) may

occur (Bevan, 2003; Burgoon, 1995; Machette, 2022b). Recent literature has applied EVT to sexual self-disclosure (Machette, 2022a, 2022b; Machette & Montgomery-Vestecka, 2023b), providing evidence of how SCD may serve as a proxy for expectancy violations regarding sexual self-disclosure, given that SCD measure the differences between expectations and perceived reality (Machette & Montgomery-Vestecka, 2023b). For instance, a recent study has found that when individuals' expectations were unmet, and such expectancy violations were assigned a negative valence, individuals' sexual satisfaction decreased. When individuals' expectations were exceeded (i.e., positive expectancy violations), their sexual satisfaction increased (Machette & Montgomery-Vestecka, 2023a). These findings were consistent when dividing SCD into their four distinct sub-dimensions (i.e., sexual relationship maintenance, sexual experimentation, sexual issues, and safe sex), indicating a positive relationship between each of the sub-dimensions and sexual satisfaction. Taken together, the existing literature has revealed significant relationships between SCD and sexual health outcomes.

In sum, this study recognizes the important role that SCD may play in predicting sexual health outcomes. For this dissertation, the sexual health outcome examined is sexual satisfaction, as it has been demonstrated in the literature that sexual self-disclosure is one of the main predictors of sexual satisfaction (Brown & Weigel, 2018; MacNeil & Byers, 2005, 2009). Collectively, the existing literature has consistently demonstrated that sexual satisfaction has a significant relationship with sexual self-disclosure, particularly when compared to other potential sexual health outcomes (e.g., condom use, orgasm). As such, this study seeks to expand past work and predicts that sexual satisfaction will have similar associations with SCD. The following offers a detailed overview of the concept.

Sexual Satisfaction. Sexual satisfaction is defined as the evaluation that an individual makes regarding the quality of their sexual involvement with a partner (Theiss & Nagy, 2010). As detailed throughout this chapter, sexual satisfaction is important to one's sexual wellbeing, as it is associated with sexual function (Peixoto et al., 2018), sexual frequency (Smith et al., 2011), emotional intimacy (Rubin & Campbell, 2012; Yoo et al., 2014), relational satisfaction (Machette, 2022a; Sprecher et al., 2006; Yoo et al., 2014), and sexual self-esteem (Machette & Drouin, 2023; Ménard & Offman, 2009). Furthermore, several studies have documented the relationship between sexual communication and sexual satisfaction. For example, past studies have illustrated that sexual communication predicts sexual satisfaction, across a variety of relationship types (e.g., dating, married; Brown & Weigel, 2018; MacNeil & Byers, 2005, 2009). As such, the existing literature provides clear evidence of a significant relationship between sexual communication and sexual satisfaction.

Emerging research on SCD offers a preliminary understanding of sexual health outcomes associated with SCD within relationships. For instance, several studies have reported that SCD and sexual satisfaction were positively associated (Machette, 2022a; Machette & Montgomery-Vestecka, 2023a), with SCD positively predicting sexual satisfaction (Machette & Montgomery-Vestecka, 2023a, 2022b). These findings suggest that as individuals' SCD scores increased (i.e., as SCD scores increase towards higher positive values), their sexual satisfaction also grew. Conversely, these findings suggest that when an individual's SCD scores decreased (i.e., their SCD scores decrease towards negative values), their sexual satisfaction was also likely to decrease. These findings may be explained by understanding that, when an individual does not get to engage in sexual communication as much as expected, they are likely not able to educate their partner on their sexual preferences, turn-ons, fantasies, and so on. As such, they are not

likely to be as satisfied during sexual activities due to their partner's lack of knowledge about their preferences. Taken together, the existing literature on the associations between SCD and sexual satisfaction provides preliminary support for the hypothesized relationship between SCD and sexual satisfaction.

To conclude, the literature reveals that sexual self-disclosure is predictive of sexual satisfaction (Brown & Weigel, 2018; Machette, 2022a; MacNeil & Byers, 2005, 2009; Rehman et al., 2011). Guided by recent studies that have revealed a positive, predictive relationship between SCD and sexual satisfaction, as well as the theoretical lens of EVT (Burgoon, 1978, 1985; Burgoon & Jones, 1976), the following hypothesis is advanced:

H4: SCD will predict sexual satisfaction positively.

Relationships between Attachment and Outcomes

In addition to the relationships discussed above, past studies have also revealed a direct relationship between both the anxious and avoidant attachment styles and various relational and sexual health outcomes. An example of such a relationship is illustrated in Candel and Turliuc's (2019) meta-analysis of attachment and relational outcomes. In the study, the researchers analyzed 132 articles that included continuous self-report measures of adult anxious and avoidant attachment and relational satisfaction, finding that relational satisfaction was negatively associated with both the anxious (r = -.32) and the avoidant (r = -.44) attachment styles. Such findings echo decades of studies that have revealed that adult attachment styles are negatively predictive of relational satisfaction in dating and married individuals (e.g., Alexandrov et al., 2005; Davis et al., 2006; Timm & Keiley, 2011). In other words, as individuals' anxious or avoidant attachment increases, their relational satisfaction decreases. These findings can be understood through the lens of attachment theory, which explains that anxious individuals often

worry about their partners abandoning them and they often view themselves as not worthy of love (Lopez Portillo, 2020; Pietromonaco & Beck, 2015). Such negative views of the self, as a result, often influence an individual to limit their communication and disclosure behaviors (Feeney, 1999; Feeney et al., 2000; Guerrero, 2022). This, in turn, results in a less satisfying relationship, as disclosure is strongly associated with relational satisfaction (Guerrero et al., 2009; Jones & Cunningham, 1996). Therefore, as an individual's anxious attachment increases, they are less likely to be satisfied in their relationship. Furthermore, attachment theory posits that avoidant individuals prefer to maintain emotional distance from their partners. This emotional distance results in a less satisfying relationship compared to one in which partners perceive higher relational closeness (Guerrero et al., 2009; Jones & Cunningham, 1996). As such, the greater one's avoidant attachment, the less likely they are to seek closeness within their relationship, resulting in lower relational satisfaction. Therefore, the fifth hypothesis proposed is:

H5: Relational satisfaction will be negatively predicted by a) anxious and b) avoidant attachment.

As with relational satisfaction, several studies have reported that both anxious and avoidant attachment negatively predict sexual satisfaction (Butzer & Campbell, 2008; Davis et al., 2006; Mark et al., 2018). In other words, decades of research have revealed that, as an individual's anxious or avoidant attachment increases, their sexual satisfaction decreases. These findings can also be understood through the lens of attachment theory. For example, as detailed above, anxiously attached individuals typically have negative views towards themselves, resulting in a fear of losing their loved ones and important relationships (Lopez Portillo, 2020; Pietromonaco & Beck, 2015). As a result of such anxiety, the same individuals often limit communicative behaviors that are perceived to be high risk (Feeney, 1999; Feeney et al., 2000;

Guerrero, 2022), such as sexual self-disclosure (Coffelt & Hess, 2014; Lopez Portillo, 2020). In response to such a perceived risk, individuals high in anxious attachment are not likely to communicate their sexual needs and desires to their sexual partners (Davis et al., 2006). Moreover, as attachment theory posits that avoidant individuals prefer to maintain emotional distance from their partners, they often limit sexual communication as a means of maintaining such distance (Coffelt & Hess, 2014; Lopez Portillo, 2020). Therefore, both anxious and avoidant attachment often limit one's engagement in sexual communication behaviors. As a result, the limited sexual communication also decreases the opportunity to educate their partners about their sexual preferences, needs, desires, and more. These conversations are critical to one's sexual satisfaction, as engaging in sexual activities with an informed partner leads to more satisfying sex (Hess & Coffelt, 2012; MacNeil & Byers, 2005). Therefore, the following hypothesis is advanced:

H6: Sexual satisfaction will be negatively predicted by a) anxious and b) avoidant attachment.

Sexual Communication Discrepancies as Mediators

SCD is central to the mediation model proposed in this dissertation. As a reminder, the concept captures the discrepancy in one's expectations for sexual communication and the amount of sexual communication that is perceived to take place within their relationship. I propose that SCD are predicted by individual (i.e., attachment) factors and that SCD, in turn, predict outcomes, both relational (i.e., relational satisfaction) and sexual health (i.e., sexual satisfaction). Thus, SCD function as a mediator between antecedents and outcomes.

The literature reviewed throughout this chapter illustrates the relationship between SCD and several individual, relational, and sexual health concepts. One of the goals of this study,

though, is to investigate whether SCD may have a mediating role in the documented relationships between some of these variables. Specifically, accounting for previous work on attachment and sexual self-disclosure behaviors, along with the hypothesized predictive relationships between anxious and avoidant attachment and SCD, this study proposes that SCD may help explain the process through which attachment and relational and sexual satisfaction are associated further, as a mediated relationship through SCD.

Recent studies have revealed that sexual communication had a mediating role in the relationship between one's attachment and sexual satisfaction. For example, studies have reported that sexual communication partially mediated the relationship between both anxious and avoidant attachment and sexual satisfaction (Goldsmith et al., 2016; Khoury & Findlay, 2014; Timm & Keiley, 2011). In other words, the existing predictive relationship between anxious and avoidant attachment and sexual satisfaction was lessened when sexual communication was accounted for in the analysis. To date, no such studies exist that have examined the mediating role of sexual communication, or sexual self-disclosure, in the relationship between attachment and relational satisfaction. However, past findings have revealed that relational and sexual satisfaction were highly correlated (Machette, 2022a), suggesting that sexual communication may serve a similar mediating role in the relationship between attachment and relational satisfaction. Furthermore, although such past studies have examined the mediating role of sexual communication, sexual self-disclosure and SCD are specific types of sexual communication behaviors. As such, they may function similarly to mediate the relationship between attachment styles and relational and sexual satisfaction.

As discussed above, past research has documented consistent associations between attachment styles and relational and sexual satisfaction. Furthermore, as proposed in this study

based on attachment theory, an individual's anxious attachment may negatively predict SCD, whereas an individual's avoidant attachment may positively predict their SCD. Also, as proposed based on the EVT framework and previous findings (Machette, 2022a; Machette & Montgomery-Vestecka, 2023a), SCD is expected to predict relational and sexual satisfaction. Therefore, based on all these associations, there may also be evidence of a mediating relationship between attachment styles and outcomes, via SCD. In other words, the predictive relationship between attachment and satisfaction (both relational and sexual) may be better explained by taking into account SCD. As hypothesized in this dissertation, one's attachment style is likely to predict SCD. For instance, an individual high in anxious attachment would likely develop low expectations for sexual communication as they would perceive such behavior to be too risky, as it could jeopardize their relationship. Someone high in avoidant attachment would likely have low expectations for sexual self-disclosure, as they would perceive such communication threatening given the vulnerability associated with sexual communication. In other words, both high anxiety and avoidance would likely establish low expectations for sexual communication. However, as sexual communication is a dyadic behavior, one's partner may engage in sexual communication more than a person expects, which would result in individuals' expectations being exceeded, leading to positive SCD. Therefore, attachment styles are hypothesized to positively predict SCD.

Furthermore, as sexual communication and sexual self-disclosure, in particular, serve a function of educating one's sexual partner, engaging in such communication less than expected (i.e., negative SCD) would likely result in a partner that is less informed about one's sexual preferences, desires, and more, which also likely results in less satisfying relational and sexual experiences. In contrast, someone who engages in sexual self-disclosure more than expected

(i.e., positive SCD) would likely have the opportunity to educate their sexual partner about their sexual needs, desires, and such, resulting in a better informed partner, and likely a more satisfying relationship and sex life. These postulations are supported by recent findings that have revealed that SCD were positively associated with relational and sexual satisfaction (Machette, 2022a; Machette & Montgomery-Vestecka, 2022a), meaning that, as one's SCD increased towards positive values, their relational and sexual satisfaction increased as well. Therefore, the predictive relationship between attachment styles and satisfaction may be explained by SCD, with one's attachment predicting their SCD, which, in turn, serves as an indicator of one having the opportunity to educate and inform their sexual partner more or less than expected; thus, predicting their relational and sexual satisfaction. Taken together, these arguments lead to the seventh hypothesis proposed:

> *H7: SCD will mediate the relationship between a) anxious attachment and relational satisfaction, b) anxious attachment and sexual satisfaction, c) avoidant attachment and relational satisfaction, and d) avoidant attachment style and sexual satisfaction.*

Sexual Self-Disclosure as Mediator

In addition to the mediating role of SCD, another goal of this dissertation is to assess how sexual self-disclosure, a more well-known and extensively studied aspect than SCD, may function as a mediator between antecedents (attachment styles) and outcomes (relational and sexual satisfaction). In other words, SCD may be a valuable mediator, but how do SCD compare to an already well documented concept, that of sexual self-disclosure?

As discussed above, attachment styles have been found to predict both relational and sexual satisfaction (Candel & Turliuc, 2019; Davis et al., 2006; Timm & Keiley, 2011). Thus, a direct relationship between these two variables exists. Also as discussed previously throughout

this dissertation, past studies have illustrated the role of sexual self-disclosure in relation to this study's variables of interest. One example is the relationship between attachment and sexual self-disclosure. For instance, past studies have revealed that one's attachment style predicted their sexual self-disclosure (Coffelt & Hess, 2014; Davis et al., 2006; Lopez Portillo, 2020). Specifically, anxiously attached individuals perceive sexual self-disclosure as too risky to their relationship and, therefore, are unlikely to engage in such communication. Such findings illustrate the negatively predictive relationship between anxious attachment and sexual self-disclosure (Lopez Portillo, 2020). Similarly, highly avoidant attachment has been found to negatively predict sexual self-disclosure (Davis et al., 2006; Lopez Portillo, 2020), as avoidant individuals often suppress their sexual self-disclosure behaviors in order to limit relational closeness (Davis et al., 2006). Taken together, past work has illustrated the predictive relationship between attachment styles and sexual self-disclosure.

Furthermore, sexual self-disclosure has been found to predict both relational and sexual satisfaction (Brown & Weigel, 2018; Rehman et al., 2011). For instance, several studies have found that sexual self-disclosure predicted relational satisfaction (Coffelt & Hess, 2014; Denes, 2012; Montesi et al., 2010). In fact, sexual self-disclosure was more strongly associated with relational satisfaction than general communication (Jones et al., 2018), which highlights the important influence of sexual self-disclosure on relational wellbeing. Similarly, numerous studies have revealed that sexual satisfaction was predicted by sexual self-disclosure (Brown & Weigel, 2018; Byers & Demmons, 1999; MacNeil & Byers, 2005, 2009; Montesi et al., 2010). For example, Brown and Weigel (2018) provided support for this relationship when proposing their contextual model of sexual communication, findings that corroborate the results of decades of past studies (Byers & Demmons, 1999; Lawrance & Byers, 1995; MacNeil & Byers, 2005, 2009;

Montesi et al., 2010; Rehman et al., 2011; Theiss, 2011). Thus, the existing literature demonstrates the predictive relationship between sexual self-disclosure and both relational and sexual satisfaction.

In light of the findings related to attachment styles, sexual self-disclosure, and satisfaction (both relational and sexual), it is possible that sexual self-disclosure explains the process through which attachment and relational and sexual satisfaction are associated. For example, both anxious and avoidant attachment have been found to negatively predict sexual self-disclosure (Coffelt & Hess, 2014; Davis et al., 2006; Lopez Portillo, 2020). Such findings could be explained by the idea that individuals high in both attachment styles perceive the risks of sexual self-disclosure outweigh the potential benefits of such communication. Therefore, these individuals limit their disclosure about their sexual preferences, dislikes, sexual needs, desires, and more. However, as discussed above, communicating such sexual information is important to one's relational and sexual satisfaction because such conversations educate their partners, in turn, resulting in more satisfying relational and sexual experiences (Hess & Coffelt, 2012; MacNeil & Byers, 2005). Therefore, the established relationship between attachment and satisfaction may be explained by one's attachment influencing their sexual self-disclosure, which, in turn, influences their relational and sexual satisfaction.

This study proposed that SCD functions as a mediator of the relationship between attachment styles as antecedents and relational and sexual satisfaction as outcomes. One of the questions that bringing attention to SCD raises is the importance of this concept in the sexual communication literature, as compared to the often-examined concept of sexual self-disclosure. As noted above, it is possible that sexual self-disclosure plays a similar, mediating, role in connecting attachment styles as antecedents and relational and sexual satisfaction as outcomes.

Therefore, the study also examines whether sexual self-disclosure behaves in similar ways. To this end, the following research questions are advanced:

RQ1: *Will sexual self-disclosure mediate the relationship between a) anxious attachment and relational satisfaction, b) anxious attachment and sexual satisfaction, c) avoidant attachment and relational satisfaction, and d) avoidant attachment and sexual satisfaction?*

RQ2: *Does the addition of self-disclosure as a mediator change the relationships between antecedents and outcomes, with SCD as mediator, in any way*?

CHAPTER 3: METHOD

Study Design

To accomplish the dissertation's goals, this study relied on a cross-sectional survey, and recruited a diverse adult sample from a crowdsource platform. The following sections detail the participants, procedures, measures, and analyses conducted for the study.

Participants

A total of 521 participants consented to participate in the study. Responses from 10 participants were eliminated because they dropped out of the study (i.e., they "returned" the study), with an additional 11 participants' responses deleted due to missing attention verification questions. Furthermore, nine responses were eliminated during data cleaning (described in the results section). The remaining 491 participants' responses were used for analyses. Participants' age ranged from 18 to 75 years (M = 39.52, SD = 11.70). The participants were primarily White and in heterosexual relationships. The average relationship length was 12.97 years (SD = 10.07). Detailed demographics are reported in Table 1.

All participants for this study were recruited from Prolific, which is a crowdsource platform that offers researchers the ability to recruit participants for social science studies (Palan & Schitter, 2018). Prolific has multiple eligibility filters (e.g., age, nationality, relationship status) from which researchers can select, which was beneficial for this study.

Given the study's intent to conduct confirmatory factor analyses for all scales, a power analysis was conducted using Soper's (2023) a-priori sample size calculator for structural equation models analysis tool. The analysis was used to determine the appropriate sample size for detecting small effects (η_p^2 = .10; Cohen, 1992) with α set at .05 and power set at .95. The effect size of .10 was selected as past studies on SCD have revealed modest effects (e.g., r^2

= .23) between SCD and some of the variables of interest (Machette, 2022a). The suggested sample from the power analysis size was 323 participants. A larger sample of 500 participants was recruited from Prolific to account for potentially invalid responses (e.g., participants who do not finish the study or fail attention verification questions).

For the dissertation study, eligibility was restricted to a) individuals who were 18 or older, b) a resident of the United States, c) sexually active, and d) in a romantic relationship (i.e., dating, married, or in a civil union). This study examined adults as they are likely to have relevant life experiences and be engaged in a committed, sexually active relationship. Participants were required to be born in, and be a resident of, the United States to reduce the effects of national culture on sexual attitudes and behaviors. Recruiting participants with similar societal and cultural backgrounds is important as past studies have revealed that individuals' view towards sex was influenced by their societal background (Buss & Schmitt, 2016). Participants needed to be in a sexually active, romantic relationship to ensure that they could set expectations for, as well as engage in, sexual communication with a partner. The distribution of participants' sex was balanced (i.e., equal numbers recruited), as Prolific offers this feature for recruitment based on biological sex. Participants' level of education, age, and geographical distribution varied within the sample (see Table 1 below for further details). Additional selection criteria for Prolific workers were used to control for the quality of responses and ensure high data quality (Peer et al., 2014). These criteria included that eligible individuals had (a) completed more than 500 Prolific tasks and (b) a 100% approval rating for their previous Prolific work, as used in similar sexual communication studies (e.g., Machette, 2022a; Machette et al., 2022).

Table 1

Sample Characteristics (N = 491)

Measures	*N*	(%)
Sex		
Male	245	49.9
Female	241	49.9
Non-Binary/Third Gender	1	0.2
Prefer not to answer	4	0.8
Gender		
Genderfluid/Genderqueer	0	0
Man	245	49.9
Non-Binary	5	1.0
Two-spirit	0	0
Woman	235	48.0
Self-Identify	1	0.2
Prefer not to answer	4	0.8
Missing data	1	0.2
Sexual Orientation		
Asexual	1	0.2
Bisexual	40	8.1
Gay	5	1.0
Heterosexual/Straight	424	86.4
Lesbian	3	0.6
Pansexual	7	1.4
Queer	8	1.6
Prefer not to answer	3	0.6
Ethnicity		
American-Indian or Alaska Native	2	0.4
Asian	19	3.9
Black or African-American	17	3.5
Native Hawaiian or other Pacific Islander	0	0
Hispanic or Latina/o	25	5.1
White	402	82.0
Combination of some of the above	20	4.1
Another ethnicity/race	1	0.2
Prefer not to answer	4	0.8
Missing data	1	0.2
Education		
High school or less	59	12.1
Current student/attended but did not graduate	93	19.1
Associate's degree	56	11.5
Bachelors degree	184	37.7

Current graduate student/attended but did not graduate	13	2.7
At least one graduate degree earned	81	16.6
Prefer not to answer	2	0.4
Income		
Less than $25,000	29	5.9
$25,001-$50,000	76	15.5
$50,001-$75,000	115	23.5
$75,001-$100,000	102	20.8
More than 100,000	161	32.9
Prefer not to answer	7	1.4
Missing data	1	0.2
Religion		
Protestant	112	22.8
Catholic	69	14.1
Mormon	3	0.6
Jewish	13	2.6
Muslim	4	0.8
Buddhist	1	0.2
Hindu	0	0
Orthodox	5	1.0
Unaffiliated	214	43.6
Self Identify	54	11.0
Prefer not to answer	16	3.3
Region		
New England (CT, ME, MA, NH, RI, VT)	29	5.9
Middle Atlantic (NJ, NY, PA)	79	16.1
East North Central (IN, IL, MI, OH, WI)	78	15.9
West North Central (IA, KS, MN, MO, NE, ND, SD)	29	5.9
South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)	95	19.3
East South Central (AL, KY, MS, TN)	35	7.1
West South Central (AR, LA, OK, TX)	50	10.2
Mountain (AZ, CO, ID, NM, MT, UT, NV, WY)	36	7.3
Pacific (AK, CA, HI, OR, WA)	57	11.6
Prefer not to answer	3	0.6
Relationship Status		
Single	0	0
Dating/committed relationship	108	22.0
Married or in a cohabiting relationship	379	77.2
Widowed	0	0
Divorced	0	0
Separated	0	0
Civil union	0	0
Other	2	0.4
Prefer not to answer	2	0.4

Procedures

Eligible participants first read a description of the study on the Prolific platform. The recruitment message informed participants of the purpose of the study, which was to respond to a series of items regarding their individual traits, their relationships, and their sex lives. Interested participants were able to access the online survey designed for the dissertation study that was hosted on Qualtrics. The first page of the questionnaire included a consent form that provided additional information about the study. If participants consented to participate, they were able to proceed to the next page, which introduced the study measures. If they did not consent, they were redirected to the end of the survey and not compensated.

Participants completed a series of instruments that assessed their individual traits, relational characteristics, sexual communication behaviors, and perceptions of their sexual relationships. These measures, as well as the items for each measure, were presented in random order to the participants to reduce order bias (Hahn et al., 2004). For example, each scale was presented in a separate block, with the blocks after the consent page and before the demographic items being randomized. In addition, the order of scale items within each of the blocks was also randomized. At the end of the survey, demographic information (i.e., age, gender, biological sex, sexual orientation, education, U. S. region in which participants lived, ethnicity, relationship type, religion, income, and relationship length) was collected. On average, study completion took approximately nine minutes (M = 8.90, SD = 6.73) and participants received $3.00 USD for their participation. The research was approved by the Institutional Review Board at the author's university.

Measures

To promote usable data and prevent participants from providing serial responses, attention verification questions were included throughout the survey in-between the measures detailed below. Questions asked participants to select a particular answer choice (e.g., "This is an attention verification question, please select 'Strongly Agree' for your answer"). If a participant missed any attention verification question, their submission was not used for data analyses (albeit those who only missed one attention verification question were compensated due to Prolific's guidelines regarding the use of attention verification questions).

Attachment

Attachment was measured using the Experiences in Close Relationship Scale (ECR)-Short version (Brennan et al., 1998; see Appendix A). The scale includes 12 items that were presented on a 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*). There are six items for avoidant attachment (e.g., "I try to avoid getting too close to my partner") and six items for anxious attachment (e.g., "My desire to be very close sometimes scares people away"). Previously reported Cronbach's alpha for the avoidant attachment subscale was .94, whereas the previously reported Cronbach's alpha for the avoidant attachment subscale was .91 (Brennan et al., 1998). Higher scores on each subscale indicate a higher degree of avoidant and anxious attachment, respectively.

Sexual Communication Discrepancies

The Sexual Communication Discrepancy Index (SCDI; Machette et al., 2022; see Appendix B) was used to measure SCD in participants' relationship. The scale includes 48 items that were measured on a 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*), 24 for expected (e.g., "I expect to talk to my partner about how to spice up our sex life") and 24 for actual sexual communication (e.g., "I talk to my partner about how to spice up our sex life")

in participants' relationships. The SCDI is composed of four sub-dimensions. The first one, sexual relationship maintenance, consists of 11 items that captures the disclosure of sexual topics that assist in maintaining the relationship (e.g., "what feels pleasurable during sex"). The second sub-dimension, sexual experimentation, consists of four items that capture the disclosure of opportunities to expand a couple's sex life (e.g., "our sexual fantasies"). The third sub-dimension, sexual issues, consists of six items that measure the disclosure of sexual challenges, such as issues occurring during sex (e.g., "difficulties with having sex"). The final sub-dimension, safe sex, consists of three items that capture the disclosure of consequences associated with sex and the use of contraception (e.g., "the consequences of unprotected sex"; Machette et al., 2022).

The SCDI can be calculated as one index or calculated as four index scores, one for each sub-dimension (Machette et al., 2022). For this study, given that CFAs were performed, the SCDI was calculated as a discrepancy variable, with each of the 24 items used representing a discrepancy score (i.e., the difference between the specific item actual communication score minus the same item's expected communication score for a participant). Regardless of the calculation, (a) negative discrepancy score(s) indicate(s) people have unmet expectations for sexual communication, whereas (a) positive discrepancy score(s) show(s) that individuals' expectations for sexual communication are exceeded (Machette et al., 2022). A score of 0 means that individuals' expectations for sexual communication are matched by the perceived actual amount of sexual communication taking place in their relationships. Furthermore, CFAs were conducted to examine whether the measure should be treated as a single variable (i.e., the second-order SCDI factor) or as four variables (i.e., the four sub-dimensions, first-order factors).

When calculated as a single score, previously reported Cronbach's alpha of the SCDI

was .94 for the expected subscale and .95 for the actual subscale (Machette, 2022a). When calculated as four individual scores, previously reported Cronbach's alpha for the expected sexual relationship maintenance subscale was .93, whereas the actual sexual relationship maintenance subscale had an alpha of .92. Previously reported Cronbach's alpha for the expected sexual experimentation subscale was .78, whereas the actual sexual experimentation subscale was .81. Previously reported Cronbach's alpha for the expected sexual issues subscale was .90, whereas the actual sexual issues subscale was .87. Finally, previously reported Cronbach's alpha for the expected safe sex subscale was .86, whereas the actual safe sex subscale was .85 (Machette, 2022a).

Sexual Self-Disclosure

To measure sexual self-disclosure, participants completed Byers and Demmons' (1999) Sexual Self-Disclosure Questionnaire (see Appendix C). The scale contains 12 items that were measured on a 7-point Likert scale (1 = *never* to 7 = *always*) to assess how much participants communicated to their partner about their sexual likes and dislikes (e.g., "The way(s) you like to be touched sexually"). Higher scores on this measure indicate high levels of sexual self-disclosure. Previously reported Cronbach's alpha for the sexual self-disclosure scale was 0.86 (Byers & Demmons,1999).

Relational Satisfaction

Participants' relational satisfaction was measured using the Quality of Marriage Index (Norton, 1983; see Appendix D). The index includes six items that were presented on a 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*) to assess participants' perceptions of their relationship (e.g., "My relationship with my partner is very stable"). Higher scores indicate higher relational satisfaction. Previously reported Cronbach's alpha for the scale was .76

(Norton, 1983).

Sexual Satisfaction

Theiss's (2011) sexual satisfaction measure (see Appendix E) was used to assess participants' reported sexual satisfaction within their relationship. The scale includes six items that measure the overall sexual satisfaction in a respondent's relationship (e.g., "My partner and I have a fulfilling sexual relationship"), on a 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*). Higher scores indicate higher sexual satisfaction. Previously reported Cronbach's alpha for the sexual satisfaction measure was .90 (Theiss, 2011).

Table 3 in the next chapter includes detailed descriptive statistics (mean and standard deviation scores) for the continuous variables described above. In addition, Cronbach's alpha reliability scores from the present study are also include in the table.

Demographic Questions

At the end of the survey, participants were asked to respond to a series of demographic items (see Appendix F). These demographics were measured both to describe the sample rigorously but also to account for possible covariates during the analyses, as such variables have been found to be associated with SCD in past studies (Machette, 2022a). Participants indicated their age, biological sex, gender, sexual orientation, ethnicity, level of education, income, religion, relationship status (e.g., dating, married/domestic partnership, etc.), sexual frequency relational length, and geographic region in which they lived. For ethnicity, biological sex, sexual orientation, geographic region of residence, sexual frequency, income, religion, and education, participants answered multiple-choice questions. For age, participants entered their age in a text box. For the length of their romantic relationship, participants entered the number of years they have been romantically involved with their partner, also in a text box.

Chapter 4: RESULTS

Data Cleaning

Prior to analyses, data were examined and cleaned. First, items were reverse scored if needed. Next, missing data was evaluated via Little's MCAR analysis and found to be missing completely at random as Little's test for missingness was non-significant, $\chi^2(3{,}076) = 1{,}540.16$, $p = 1.00$. A total of 47 missing values were, therefore, replaced with the series mean (Johnson & Young, 2011; Little & Rubin, 2019). Next, the data were examined for outliers (i.e., standardized z-scores > |3.29| standard deviations from the mean for each variable), and nine extreme scores were removed from the initially retained 500 scores (Tabachnick and Fidell, 2018), resulting in a final sample of 491 participant responses to be used for analyses. Next, data were checked for normality (i.e., skewness < |3| and kurtosis < |7|; Byrne, 2010), and all data were found to be below these recommended values.

Next, an overall CFA for all continuous scales in the study was conducted to ensure each of them met validity and factor consistency standards (Hunter & Gerbing, 1982). The analyses were conducted in Mplus 8.6 (Muthén & Muthén, 2021), using the raw data as input, maximum likelihood as the estimation method, the default settings for the metric assumption (i.e., first indicator in each scale set to 1), and latent factors allowed to covary. SCD was separated into four factors as conceptualized by Machette et al. (2022). Model fit was evaluated using the following standards: the chi-square statistic (which, ideally, should be non-significant, but, realistically, given the number of items and factors was not expected to be; Brown, 2015); the RMSEA, which should be ≤ .06 (Hu & Bentler, 1999) but with values ≤ .08 considered acceptable (Browne & Cudeck, 1993); the CFI, which should be ≥ .95 (Hu & Bentler, 1999) but with values ≥ .90 considered acceptable (Bentler, 1990; Hair et al., 2018); and the SRMR, which

should be ≤ .08 (Hu & Bentler, 1999). The initial model showed poor fit (see Table 2 below for fit indices). To improve model fit, I examined possible areas of strain on the model (Brown, 2015), particularly standardized path coefficients from each latent factor to its indicators. All items whose standardized path coefficients were < 0.6 were iteratively removed (Field, 2005; Tabachnick & Fiddell, 2018). In total, three items were removed due to low standardized path coefficient values (see Table 2 note for exact items). Next, I examined the possibility of permitting covariances between the errors of items within the same scale that were worded similarly or shared some wording similarity (Brown, 2015). In total, nine pairs of error covariances were permitted (see Table 2 for exact items whose errors were allowed to covary). After such modifications were implemented, the CFA model fit was adequate, meeting several of the model fit guidelines that were used as criteria for assessing it (see Table 2 for fit indices).

Table 2

Confirmatory Factor Analyses Results

Model	χ^2	*df*	*p*	RMSEA [90% CI]	CFI	SRMR
Initial model	4,939.56	1,674	.00	.06 [.061; .065]	.86	.06
Revised model[a]	3,766.43	1,492	.00	.06 [.054; .058]	.90	.05

Note: $N = 491$.
[a]Revised model without item 18 in the SCDI scale and error covariances permitted between the errors of SCDI items 1 and 3, items 1 and 4, items 3 and 4, items 9 and 10, items 20 and 21, and items 22 and 23, as well as avoidant attachment items 1 and 3, and sexual self-disclosure items 1 and 2, item 2 and 4, and items 8 and 10.

Because the SCDI scale has been previously conceptualized as a second-order solution with four first-order factors (Machette et al., 2022), this scale was examined further to determine if a second-order solution was feasible. A separate CFA with the four factors first-order solution retained following the overall CFA reported above was conducted. It yielded a model fit with $\chi^2(218) = 611.34$, $p < .001$, RMSEA = .061 [90% CI: 0.055; 0.066], CFI = .94, SRMR = .05. The second-order factor in which SCD was added as a fifth factor yielded the following model

fit: $\chi^2(220) = 657.85$, $p < .001$, RMSEA = .064 [90% CI: 0.058; 0.069], CFI = .93, SRMR = .06. Per Brown's (2015) suggestion, the chi-square difference between the second-order model and the four-factors first-order model was calculated. The difference in chi-square between the two models was significant, $\Delta_{\chi}^2 = 46.51$, $\Delta_{df} = 2$, $p < .001$, suggesting that the second-order model worsened the model fit compared to the four-factors first-order model. Notably, other fit indices also became worse in the second-order model. Therefore, the four-factors solution with SCD separated into its component sub-dimensions was used for all subsequent analyses in this study.

Following the CFA, retained items were then mathematically averaged to form their respective scales or subscales, and Cronbach's alpha reliability scores for the observed composite variables were calculated. Descriptive statistics were also calculated for each composite variable (see Table 3 for all this information). Lastly, correlations between the observed composite continuous variables were also calculated and are presented in Table 4.

Table 3

Descriptive Statistics for Continuous Study Variables

	M	*SD*	Cronbach's Alpha
Anxious attachment	2.41	1.26	.79
Avoidant attachment	1.97	0.93	.85
SCD. Sexual relationship maintenance	-0.81	1.10	.93
SCD. Sexual experimentation	-0.94	1.33	.84
SCD. Sexual issues	-0.97	1.38	.86
SCD. Safe sex	-0.99	1.56	.84
Relational satisfaction	6.14	1.11	.97
Sexual satisfaction	5.22	1.45	.92
Sexual self-disclosure	3.63	1.49	.95

Covariate Analysis

Prior to testing the study's hypotheses and research questions, several analyses were performed to check whether demographics needed to be controlled for during the study's analyses. Several of these demographic variables had been identified as significant covariates in

various past studies examining sexual communication and relational and sexual health outcomes (Blunt-Vinti et al., 2019; Delaney, 2021; Herbenick et al., 2019; Higgins et al., 2011; Impett et al., 2008). First, a bivariate correlational analysis was performed to examine the relationships between the two continuous demographic items (i.e., age and relationship length) and all continuous variables of interest in this study. The analysis revealed that both age and relational length had weak or nonsignificant associations with the study variables (see Table 4). As such, neither concept was used as a covariate in subsequent study analyses.

Second, a multivariate analysis of variance (MANOVA) was performed to test if the nominal demographic variables measured (i.e., biological sex, gender, sexual orientation, ethnicity, level of education, income, relationship status, sexual frequency, and geographic region) yielded any differences on the continuous study variables. Prior to conducting the MANOVA, several of the demographic variable were recoded to form fewer but more meaningful categories based on the distribution of responses for each variable. Sex was recoded into male (n = 245) and female (n = 241), treating the remaining five cases that had indicated another answer as missing data. Gender was recoded into man (n = 245) and woman (n = 235), treating the remaining ten cases who selected another option as missing data (in addition to an already existent missing response). Sexual orientation was recoded into straight (n = 424) and LBGTQIA+ (n = 64), treating the three cases that preferred not to answer as missing data. Ethnicity was categorized into Caucasian (n = 402) and other ethnicities (n = 84), with four cases who did not provide an answer to this question treated as missing data (in addition to an already existent missing data response). Education was recoded into high school diploma or less (n = 59), some college or a two-year degree (n = 149), four-year degree (n = 184), and attended/received a graduate degree (n = 94), treating five cases who indicated they preferred not to answer or did not provide an

answer as missing data. Income was categorized into less than $50,000 (*n* = 105), $50,000 to $75,000 (*n* = 115), $75,000 to $100,000 (*n* = 102), and over $100,000 (*n* = 161), with eight responses who selected they preferred not to answer this demographic question or did not answer it treated as missing data. Religion was recoded into Protestant (*n* = 112), Catholic (*n* = 69), unaffiliated (*n* = 214), and other religion (*n* = 80), with 16 cases who preferred not to answer treated as missing data. Relationship status was recoded into dating/committed relationship (*n* = 108) and married/civil union (*n* = 379), treating two cases who selected "other" as a response and two cases who did not provide an answer as missing data. Region of the United States in which participants lived was not recoded. Finally, sexual frequency originally included eight categories: not at all (*n* = 14), once or twice (*n* = 34), once a month (*n* = 49), two to three times a month (*n* = 101), weekly (*n* = 100), two to three times per week (*n* = 150), four or more times per week (*n* = 35), and prefer not to answer (*n* = 8). It was then recoded into rare (i.e., reported a sexual frequency of zero to two times within the past 12 months; *n* = 48), monthly (i.e., reported a sexual frequency of once to three times a month within the past 12 months; *n* = 150), and weekly (i.e., reported a sexual frequency of once to four or more times a week within the past 12 months; *n* = 285), treating the eight cases who did not provide an answer as missing data.

The MANOVA results revealed that sexual frequency was a significant covariate, multivariate Wilks' lambda = .64, $F(14, 844) = 15.23$, $p < .001$, partial $\eta^2 = .20$. The univariate tests indicated that sexual frequency had a significant effect on all dependent variables except the sub-dimension of safe sex in the SCD (see Table 6). As such, this variable was controlled for during all subsequent analyses. The MANOVA analyses also revealed a significant multivariate result for income, Wilks' lambda = .92, $F(21, 1212.31) = 1.66$, $p < .05$, partial $\eta^2 = .03$.

Table 4

Bivariate Correlations for Continuous, Observed, Composite Study Variables

	1	2	3	4	5	6	7	8	9
1. Avoidant attachment	-								
2. Anxious attachment	.46**	-							
3. SCD. Sexual relationship maintenance	-.28**	-.22**	-						
4. SCD. Sexual experimentation	-.25**	-.19**	.77**	-					
5. SCD. Sexual issues	-.05	-.11*	.54**	.46**	-				
6. SCD. Safe sex	-.03	-.05	.32**	.32**	.42**	-			
7. Relational satisfaction	-.63**	-.42**	.35**	.33**	.15**	.18**	-		
8. Sexual satisfaction	-.48**	-.39**	.56**	.49**	.21**	.15**	.63**	-	
9. Sexual self-disclosure	-.30**	-.08	.34**	.28**	.22**	.12**	.27**	.35**	-

Note: **$p < .01$.

Table 5

Bivariate Correlations for Continuous Demographic Variables and Observed, Composite Study Variables

	Age	Relational Length
1. Avoidant attachment	.08	.03
2. Anxious attachment	-.15**	-.14**
3. SCD. Sexual relationship maintenance	-.01	-.01
4. SCD. Sexual experimentation	.05	.07
5. SCD. Sexual issues	.03	.07
6. SCD. Safe sex	-.10	.08
7. Relational satisfaction	-.07	-.04
8. Sexual satisfaction	-.15**	-.13**
9. Sexual self-disclosure	-.13**	-.06

Note: **$p < .01$.

The univariate tests indicated that income yielded significant differences on the sexual relationship maintenance sub-dimension of SCD $F(3,428) = 4.22$, $p = .01$, partial $\eta^2 = .03$, and on sexual self-disclosure, $F(3,428) = 2.90$, $p = .03$, partial $\eta^2 = .12$. Specifically, for sexual relationship maintenance, a Tukey HSD post hoc analysis revealed higher relationship maintenance scores for individuals who reported over 100,000 as their annual income ($M = 5.04$, $SE = 0.14$) compared to those who reported $75,000 to $100,000 as their income ($M = 4.59$, $SE = 0.14$), $p = .01$. The post hoc Tukey HSD analysis did not reveal any significant differences between groups for sexual self-disclosure based on income. Given these results, the only one significant difference was not considered meaningful for analyses; hence, income was not used as a covariate in this study.

Regression Analyses

To examine the first six hypotheses, a series of hierarchical linear regressions were performed in SPSS 28.0. Sexual frequency was dummy coded into two categories. For the first dummy coded variable, all participants that reported sexual frequency of zero to twice a year were coded as 1, and the remaining participants were coded as 0. For the second dummy coded variable, all participants who reported sexual frequency of once to thrice a month were coded as 1 and all other participants were coded as 0. These two dummy coded variables were used to control for sexual frequency in all subsequent analyses.

In each regression analysis, sexual frequency was entered in the first block as a control variable, and the independent variables of interest for each analysis were entered in the second block. The first hypothesis proposed that the anxious attachment style would positively predict sexual communication discrepancies (SCD). The second hypothesis proposed that the avoidant attachment style would positively predict SCD. The two hypotheses were tested together in four

separate regression analyses with the anxious and avoidant attachment styles as the independent variables (together) and each of the four SCD sub- dimensions as the dependent variable, one for each regression conducted. The analyses revealed that the anxious attachment did not significantly predict any of the SCD sub-dimensions. Therefore, H1 was not supported. The analyses, however, revealed that avoidant attachment negatively predicted sexual relational maintenance and sexual experimentation. In other words, as avoidant attachment increased, each of these sexual communication discrepancies dimensions decreased, meaning more negative scores, which are indicative of expectations that far exceed actual communication regarding sexual communication in individuals' relationships. However, although these relationships were significant, their direction was opposite than hypothesized. Thus, H2 was not supported as initially formulated for these sub-dimensions. In addition, H2 was not supported for the other two sub-dimensions of SCD, as avoidant attachment did not significantly predict sexual issues or safe sex. Therefore, although some significant results were found, H2 was not supported as originally posited. See Tables 7 - 10 below for the detailed results of each analysis.

Hypothesis three proposed that SCD would predict relational satisfaction positively. To test this hypothesis, a hierarchical regression was conducted with sexual frequency (the covariate) entered in the first block, and the four sub-dimensions of SCD entered as independent variables in the second block. The analysis revealed that sexual relationship maintenance, sexual experimentation, and safe sex positively predicted relational satisfaction. In other words, as SCD values increased (i.e., expectations become met or are exceeded by the communication taking place within the relationship), relational satisfaction also increased. The results also revealed that sexual issues negatively predicted relational satisfaction. That is, the more individuals engaged in sexual communication about sexual challenges and issues beyond their expectations, the more

their relational satisfaction decreased. Therefore, the results offer partial support for H3, with three of the four SCD sub-dimensions positively predicting relational satisfaction (as hypothesized), and one sub-dimension negatively predicting relational satisfaction (contrary to what was hypothesized). See Table 11 below for full regression results.

The fourth hypothesis proposed that SCD would predict sexual satisfaction positively. A similar analysis to the one employed for testing H3 was used, with sexual satisfaction as the dependent variable, though. Results revealed that sexual relationship maintenance and sexual experimentation positively predicted sexual satisfaction. That is, as SCD scores increased (i.e., expectations become met or are exceeded by the communication taking place within the relationship), sexual satisfaction also increased. The results also revealed that safe sex negatively predicted sexual satisfaction. In other words, the more individuals engaged in discussions about safe sex practices (e.g., condom use, contraception, risks of pregnancy) beyond their expectations, the less their sexual satisfaction. Sexual issues did not significantly predict sexual satisfaction (see Table 12 below for full regression results). Therefore, H4 was partially supported, with two of the SCD sub-dimensions predicting sexual satisfaction as hypothesized, and one sub-dimension predicting sexual satisfaction in the opposite direction than hypothesized.

Hypothesis five proposed that relational satisfaction would be negatively predicted by a) anxious and b) avoidant attachment. To test this hypothesis, another hierarchical regression was conducted with sexual frequency entered as the covariate in the first block, then the two attachment styles entered as independent variables in the second block, while relational satisfaction was the dependent variable. Results provided full support for H5 as both the anxious and avoidant attachment styles significantly and negatively predicted relational satisfaction.

Table 6

MANOVA Results for Sexual Frequency and Dependent, Observed, Continuous Study Variables

	Rare Sexual Frequency		Monthly Sexual Frequency		Weekly Sexual Frequency		*F*-test (2, 428)	partial η^2
Dependent variable	*M*	*SE*	*M*	*SE*	*M*	*SE*		
SCD. Sexual relationship maintenance	4.00[a]	0.17	4.93[a]	0.12	5.47[a]	0.10	47.12***	.18
SCD. Sexual experimentation	3.81[a]	0.23	4.75[a]	0.15	5.24[a]	0.13	25.26***	.11
SCD. Sexual issues	4.14[a,b]	0.25	5.07[a]	0.16	5.14[b]	0.14	9.80***	.04
SCD. Safe sex	4.52	0.28	4.89	0.19	5.09	0.16	2.62	.01
Relational satisfaction	5.04[a]	0.19	5.98[a]	0.13	6.31[a]	0.11	93.18***	.30
Sexual satisfaction	3.43[a]	0.22	4.68[a]	0.14	5.85[a]	0.12	26.78***	.11
Sexual self-disclosure	2.59[a]	0.26	3.21[a]	0.17	3.92[a]	0.15	21.09***	.09

Notes: *** $p < .001$.

Means with the same subscript in the same row are significantly different, $p < .0$

Table 7

Hierarchical Regression Results for Attachment and Sexual Relationship Maintenance (H1a & H2a)

	Model 1			Model 2		
Independent variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Rare SF dummy	-1.47***	0.28	-.40***	-1.27***	0.27	-.34***
Monthly SF dummy	0.05	0.32	.01	-0.04	0.31	-.01
Anxious Attachment				-0.07	0.04	-.08
Avoidant Attachment				-0.23***	0.05	-.19***
Adjusted R^2		.15			.20	
F-test value		43.60***			32.28***	

Note: ***$p < .001$.

Table 8

Hierarchical Regression Results for Attachment and Sexual Experimentation (H1b & H2b)

	Model 1			Model 2		
Independent variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Rare SF dummy	-1.58***	0.34	-.35***	-1.35***	0.34	-.30***
Monthly SF dummy	0.24	0.40	.05	0.15	0.39	.03
Anxious Attachment				-0.09	0.05	-.08
Avoidant Attachment				-0.24***	0.07	-.17***
Adjusted R^2		.10			.14	
F-test value		27.00***			20.74***	

Note: ***$p < .001$.

Table 9

Hierarchical Regression Results for Attachment and Sexual Issues (H1c & H2c)

	Model 1			Model 2		
Independent variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Rare SF dummy	-1.16**	0.37	-.25**	-1.11**	0.37	-.24**
Monthly SF dummy	0.18	0.43	.03	0.16	0.43	.03
Anxious Attachment				-0.11	0.05	-.10
Avoidant Attachment				0.05	0.07	.03
Adjusted R^2		.05			.05	
F-test value		12.88***			7.44***	

Note: **$p < .01$, ***$p < .001$.

Table 10

Hierarchical Regression Results for Attachment and Safe Sex (H1d & H2d)

	Model 1			Model 2		
Independent variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Rare SF dummy	-0.96*	0.42	-.18*	-0.93*	0.42	-.18*
Monthly SF dummy	0.38	0.49	.06	0.37	0.49	-.06
Anxious Attachment				-0.04	0.06	-.03
Avoidant Attachment				0.00	0.09	.00
Adjusted R^2		.01			.01	
F-test value		4.60**			2.42*	

Note: *$p < .05$, **$p < .01$.

Table 11

Hierarchical Regression Results for SCD and Relational Satisfaction (H3)

	Model 1			Model 2		
Independent variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Rare SF dummy	-1.81***	0.29	-.48***	-1.39***	0.28	-.37***
Monthly SF dummy	0.89**	0.33	.20**	0.84**	0.32	.19**
SCD. Sexual relationship maintenance				-0.18*	0.07	.18*
SCD. Sexual experimentation				0.12*	0.05	.14*
SCD. Sexual issues				-0.09*	0.04	-.11*
SCD. Safe Sex				0.07*	0.03	.10*
Adjusted R^2		.11			.18	
F-test value		30.89***			18.91***	

Note: *$p < .05$, **$p < .01$, ***$p < .001$.

Table 12

Hierarchical Regression Results for SCD and Sexual Satisfaction (H4)

	Model 1			Model 2		
Independent variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Rare SF dummy	-2.70***	0.35	-.55***	-1.81***	0.32	-.37***
Monthly SF dummy	0.72	0.41	.13	0.68	0.36	.12
SCD. Sexual relationship maintenance				0.55***	0.08	.41***
SCD. Sexual experimentation				0.17**	0.06	.15**
SCD. Sexual issues				-0.15**	0.05	-.14**
SCD. Safe Sex				-.01	0.04	-.01
Adjusted R^2		.20			.39	
F-test value		53.72***			53.72***	

Note: **$p < .01$, ***$p < .001$.

In other words, as one's anxious and avoidant attachment increased, their relational satisfaction decreased. Table 13 below provides the full regression details.

Similarly, the sixth hypothesis proposed that sexual satisfaction would be negatively predicted by a) anxious and b) avoidant attachment. A hierarchical regression was conducted for this analysis as well, with the same specifications as the regressions described above for H5 but replacing the dependent variable with sexual satisfaction. H6 was also supported as both anxious and avoidant attachment styles significantly and negatively predicted sexual satisfaction. That is, as one's anxious and avoidant attachment increased, their sexual satisfaction decreased. Table 14 below provides the full regression details.

Mediation Analysis

The literature highlights various approaches to mediation [e.g., see Hayes (2018) and Kenny (2021)]. In the present study, Hayes' (2018) standards were used to establish mediation, that is, mediation was considered to occur when the follow criteria were met. First, the independent variable (*X*) significantly predicted the mediator (*M*). Next, the mediator (*M*) significantly predicted the outcome variable (*Y*). Lastly, the indirect effect of *X* on *Y* through *M* was statistically significant. In line with Hayes (2018), indirect effects were considered significant when the 95% bias-corrected and accelerated confidence interval (95% BCa CI) did not contain zero, which indicates that the indirect effect is significantly different from zero (Hayes, 2018).

The seventh and final hypothesis predicted that SCD would mediate the relationship between a) anxious attachment and relational satisfaction, b) anxious attachment and sexual satisfaction, c) avoidant attachment and relational satisfaction, and d) avoidant attachment style and sexual satisfaction. To examine this hypothesis, four separate analyses were conducted in PROCESS

version 4.0 (2021), pre-set Model 4, with 10,000 bootstraps, bias-corrected, and accelerated 95% confidence intervals. In each analysis, the two dummy coded sexual frequency variables were entered as covariates. The independent variable (*X*) was one of the attachment styles (i.e., avoidant or anxious), and the four sub-dimensions of SCD (i.e., sexual relationship maintenance, sexual experimentation, sexual issues, and safe sex) were entered as mediators (*M*). The dependent variable (*Y*) entered was either relational or sexual satisfaction, depending on which sub-part of the hypothesis was tested.

The first analysis examined the mediating effects of anxious attachment on relational satisfaction, through the four SCD sub-dimensions. First, for *X* predicting *Y*, the model examining the relationship between anxious attachment and relational satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 55.85$, $p < .001$, $R^2 = .26$. Anxious attachment did, indeed, predict relational satisfaction. Next, for *X* predicting *M*, the models with anxious attachment as the predictor and sexual frequency as the covariate were significant when predicting sexual relationship maintenance, $F(3, 487) = 35.74$, $p < .001$, $R^2 = .18$, sexual experimentation, $F(3, 487) = 22.87$, $p < .001$, $R^2 = .12$, sexual issues, $F(3, 487) = 9.80$, $p < .001$, $R^2 = .06$, and safe sex, $F(3, 487) = 3.23$, $p < .05$, $R^2 = .02$. For the first two models, anxious attachment also significantly predicted sexual relationship maintenance and sexual experimentation. For the last two models, albeit the overall models were significant (likely due to the covariate), anxious attachment did not predict sexual issues or safe sex. Next, the overall model (containing the independent variable, the four mediators, and the covariate, that is *X* and *M* predicting *Y* together) predicting relational satisfaction was significant, $F(7, 483) = 30.21$, $p < .001$, $R^2 = .30$. Sexual experimentation, sexual issues, and safe sex predicted relational satisfaction significantly. The relationship between anxious attachment and relational satisfaction

Table 13

Hierarchical Regression Results for Attachment and Relational Satisfaction (H5)

	Model 1			Model 2		
Independent variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Rare SF dummy	-1.81***	0.29	-.48***	-1.29***	0.22	-.35***
Monthly SF dummy	0.89**	0.33	.20**	0.66**	0.26	.15**
Anxious Attachment				-0.13***	0.03	-.14***
Avoidant Attachment				-0.63***	0.04	-.53***
Adjusted R^2		.11			.47	
F-test value		30.89***			110.65***	

Note: **$p < .01$, ***$p < .001$.

Table 14

Hierarchical Regression Results for Attachment and Sexual Satisfaction (H6)

	Model 1			Model 2		
Independent variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Rare SF dummy	-2.70***	0.35	-.55***	-2.19***	0.31	-.45***
Monthly SF dummy	0.72	0.41	0.13	0.50	0.36	0.09
Anxious Attachment				-0.22***	0.05	-.19***
Avoidant Attachment				-0.52***	0.06	-.33***
Adjusted R^2		.20			.40	
F-test value		63.19***			82.39***	

Note: *** $p < .001$.

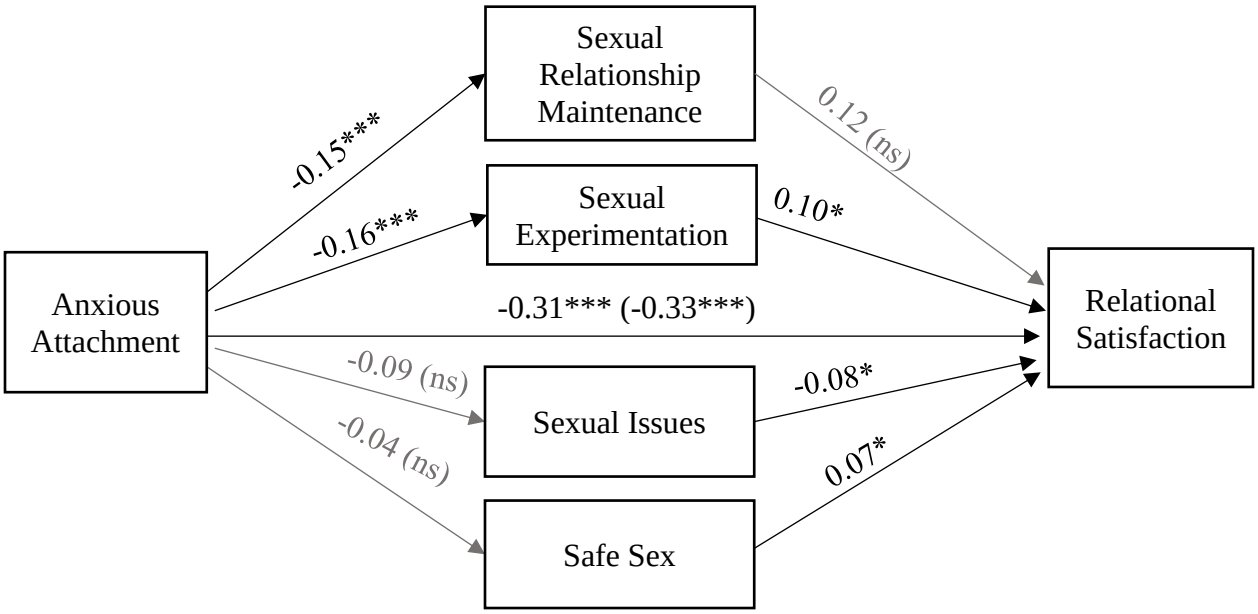
was still significant, albeit lessened (see Figure 1 for path coefficient values). Finally, the indirect effects of anxious attachment on relational satisfaction were not significant for any of the mediators: sexual relational maintenance, *ab* = -0.02, *SE* = 0.01, CI: [-0.05 to 0.01]; sexual experimentation, *ab* = -0.02, *SE* = 0.01, CI: [-0.04 to 0.01], sexual issues, *ab* = 0.01, *SE* = 0.01, CI: [-0.001 to 0.02], safe sex, *ab* = -0.01, *SE* = 0.01, CI: [-0.02 to 0.01]. Thus, H7a was not supported.

The second analysis tested the mediating effects of the four SCD sub-dimensions on the relationship between anxious attachment and sexual satisfaction. First, the model in which anxious attachment predicted sexual satisfaction (while controlling for sexual frequency; *X* predicting *Y*) was significant, $F(3, 487) = 75.70$, $p < .001$, $R^2 = .32$. Anxious attachment did, indeed, predict sexual satisfaction. Second, for *X* predicting *M*, the models with anxious attachment as the predictor and sexual frequency as the covariate were significant when predicting sexual relationship maintenance, $F(3, 487) = 35.74$, $p < .001$, $R^2 = .18$, sexual experimentation, $F(3, 487) = 22.87$, $p < .001$, $R^2 = .12$, sexual issues, $F(3, 487) = 9.80$, $p < .001$, $R^2 = .06$, and safe sex, $F(3, 487) = 3.28$, $p < .05$, $R^2 = .02$. However, anxious attachment predicted only sexual relationship maintenance and sexual experimentation significantly. Next, the overall model (containing the independent variable, the mediators, and the covariate; *X* and *M* predicting *Y*) predicting sexual satisfaction was significant, $F(7, 483) = 60.33$, $p < .001$, $R^2 = .47$. Sexual relationship maintenance, sexual experimentation and sexual issues predicted sexual satisfaction significantly. Anxious attachment continued to predict sexual satisfaction as well, albeit to a lesser extent (see Figure 2 for path coefficient values). Finally, the indirect effects of anxious attachment on sexual satisfaction were significant for both sexual relationship maintenance, *ab* = -0.07, *SE* = 0.02, CI: [-0.12 to -0.03], and sexual experimentation, *ab* = -0.02,

SE = 0.01, CI: [-0.05 to -0.003]. The indirect effects of anxious attachment on sexual satisfaction were not significant for either sexual issues, *ab* = 0.01, *SE* = 0.01, CI: [-0.01 to 0.03], or safe sex, *ab* = -0.01, *SE* = 0.01, CI: [-0.01 to 0.01]. Thus, H7b was partially supported.

Figure 1

Mediation Model Results for Anxious Attachment and Relational Satisfaction (H7a)



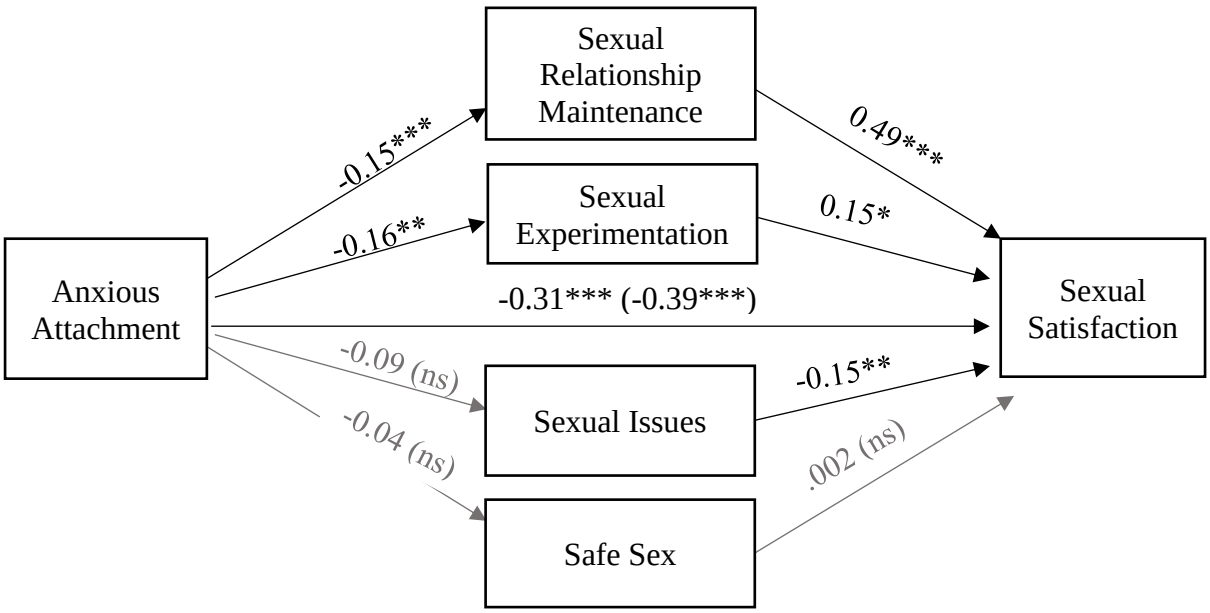
Note: All coefficients in the figure are unstandardized. The direct effect of anxious attachment on relational satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

Next, the third analysis tested the mediating effects of avoidant attachment on relational satisfaction, through the four SCD sub-dimensions. First, for *X* predicting *Y*, the model examining the relationship between avoidant attachment and relational satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 138.40$, $p < .001$, $R^2 = .46$. Avoidant attachment did, indeed, predict relational satisfaction. Next, for *X* predicting *M*, the models with avoidant attachment as the predictor and sexual frequency as the covariate were significant when predicting sexual relationship maintenance, $F(3, 487) = 41.69$, $p < .001$, R^2

= .20, sexual experimentation, $F(3, 487) = 26.60$, $p < .001$, $R^2 = .14$, sexual issues, $F(3, 487) = 8.60$, $p < .001$, $R^2 = .05$, and safe sex, $F(3, 487) = 3.09$, $p < .05$, $R^2 = .02$. For the first two

Figure 2

Mediation Model Results for Anxious Attachment and Sexual Satisfaction (H7b)



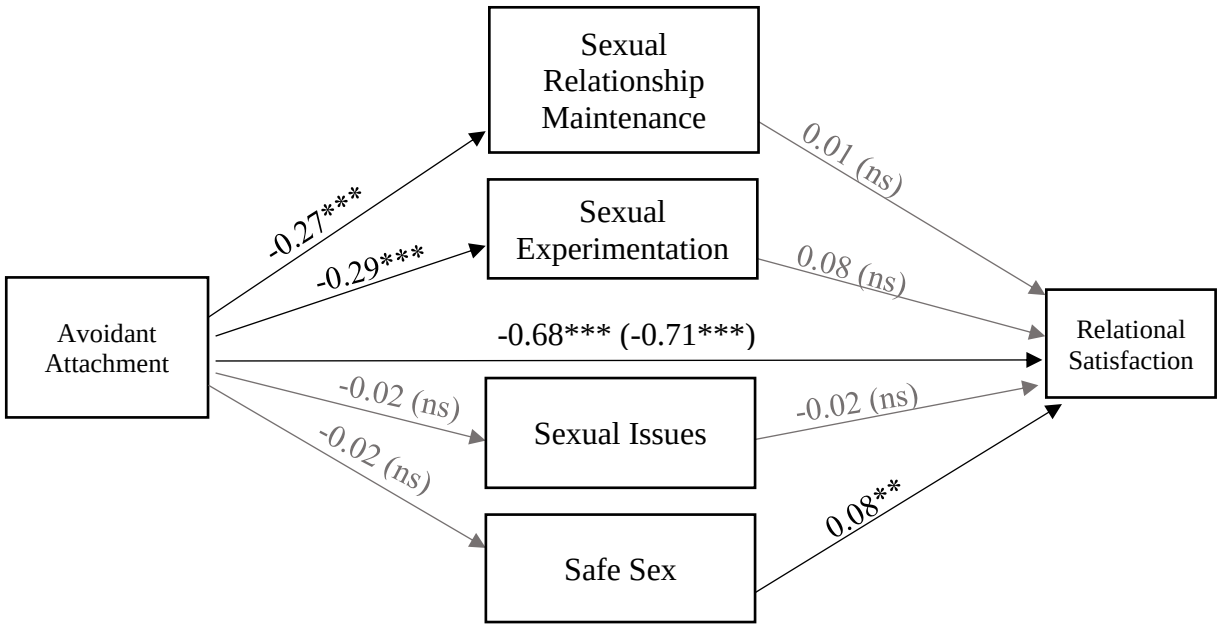
Note: All coefficients in the figure are unstandardized. The direct effect of the anxious attachment on sexual satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

models, avoidant attachment predicted sexual relationship maintenance and sexual experimentation. For the final two models, albeit the overall models were significant (likely due to the covariate), avoidant attachment did not predict sexual issues or safe sex. Next, the overall model (containing the independent variable, the four mediators, and the covariate, that is *X* and *M* predicting *Y* together) predicting relational satisfaction was significant, $F(7, 483) = 64.93$, $p < .001$, $R^2 = .48$. Safe sex predicted relational satisfaction significantly. The relationship between avoidant attachment and relational satisfaction was still significant, albeit lessened (see Figure 3 for path coefficient values). Finally, the indirect effects of avoidant attachment on relational

satisfaction were not significant for any of the mediators, sexual relational maintenance, *ab* = -0.004, *SE* = 0.02, CI: [-0.04 to 0.03], sexual experimentation, *ab* = -0.02, *SE* = 0.01, CI: [-0.06 to 0.003], sexual issues, *ab* = 0.01, *SE* = 0.01, CI: [-0.01 to 0.01], safe sex, *ab* = -0.01, *SE* = 0.01, CI: [-0.02 to 0.01]. Thus, H7c was not supported.

Figure 3

Mediation Model Results for Avoidant Attachment and Relational Satisfaction (H7c)



Note: All coefficients in the figure are unstandardized. The direct effect of the avoidant attachment on relational satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

Lastly, the fourth analysis examined the mediating effects of avoidant attachment on sexual satisfaction, through the four SCD sub-dimensions. First, for *X* predicting *Y*, the model examining the relationship between avoidant attachment and sexual satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 97.75$, $p < .001$, $R^2 = .38$. Avoidant attachment did, indeed, predict sexual satisfaction. Next, for *X* predicting *M*, the models with avoidant attachment as the predictor and sexual frequency as the covariate were significant when predicting sexual relationship maintenance, $F(3, 487) = 41.69$, $p < .001$, $R^2 = .20$, sexual

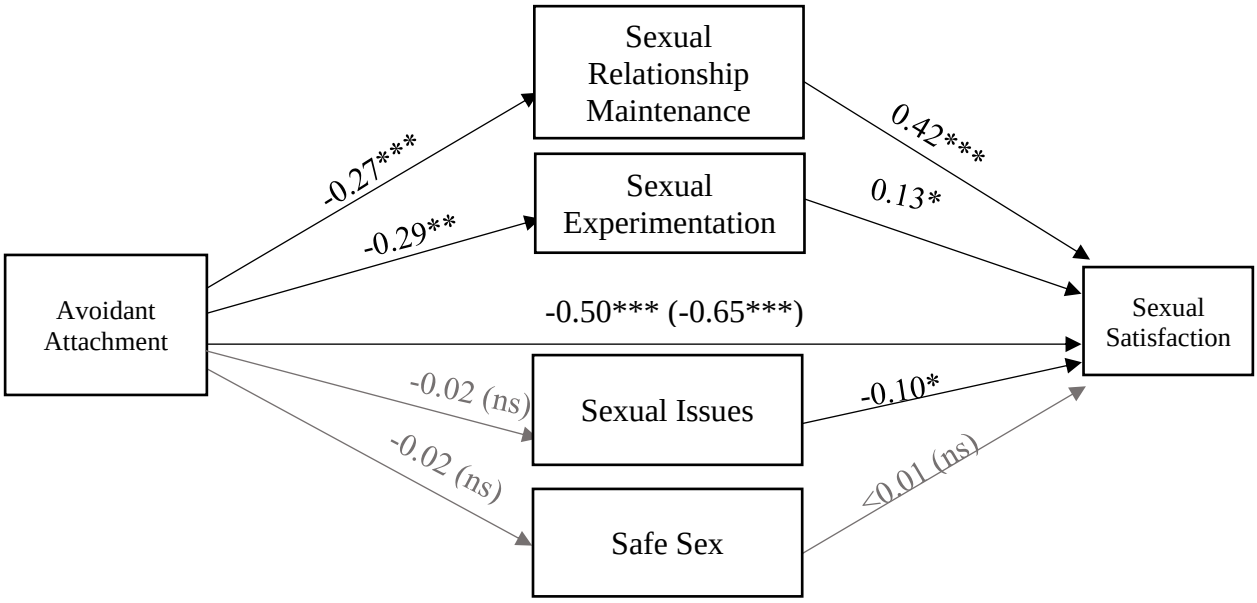
experimentation, $F(3, 487) = 26.60$, $p < .001$, $R^2 = .14$, sexual issues, $F(3, 487) = 8.60$, $p < .001$, $R^2 = .05$, and safe sex, $F(3, 487) = 3.09$, $p < .05$, $R^2 = .02$. For the first two models, avoidant attachment also significantly predicted sexual relationship maintenance and sexual experimentation. For the last two models, albeit the overall models were significant (like due to the covariate), avoidant attachment did not predict sexual issues or safe sex. Next, the overall model (containing the independent variable, the mediator, and the covariate; *X* and *M* predicting *Y*) predicting sexual satisfaction was significant, $F(7, 483) = 66.51$, $p < .001$, $R^2 = .49$. Sexual relationship maintenance and sexual experimentation predicted sexual satisfaction significantly. The relationship between avoidant attachment and sexual satisfaction was still significant, although lessened (see Figure 4 for path coefficient values). Finally, the indirect effects of avoidant attachment on sexual satisfaction were significant for both sexual relationship maintenance, *ab* = -0.12, *SE* = 0.03, CI: [-0.18 to -0.06], and sexual experimentation, *ab* = -0.04, *SE* = 0.02, CI: [-0.09 to -0.001]. The indirect effects of avoidant attachment on sexual satisfaction were not significant for either sexual issues, *ab* = 0.002, *SE* = 0.01, CI: [-0.01 to 0.02], or safe sex, *ab* = -0.0001, *SE* = 0.003, CI: [-0.01 to 0.01]. Therefore, H7d was partially supported.

Similarly, the first research question examined if sexual self-disclosure would mediate the relationship between a) anxious attachment and relational satisfaction, b) anxious attachment and sexual satisfaction, c) avoidant attachment and relational satisfaction, and d) avoidant attachment style and sexual satisfaction. To examine this research question, four separate analyses were conducted in PROCESS version 4.0 (2021), pre-set Model 4, with 10,000 bootstraps, bias-corrected, and accelerated 95% confidence intervals. In each analysis, the two dummy coded sexual frequency variables were entered as covariates. The independent variable

(*X*) was one of the attachment styles (i.e., avoidant or anxious), and sexual self-disclosure was entered as the mediator (*M*). The dependent variable (*Y*) entered was either relational or sexual satisfaction, depending on which sub-part of the research question was examined.

Figure 4

Mediation Model Results for Avoidant Attachment and Sexual Satisfaction (H7d)



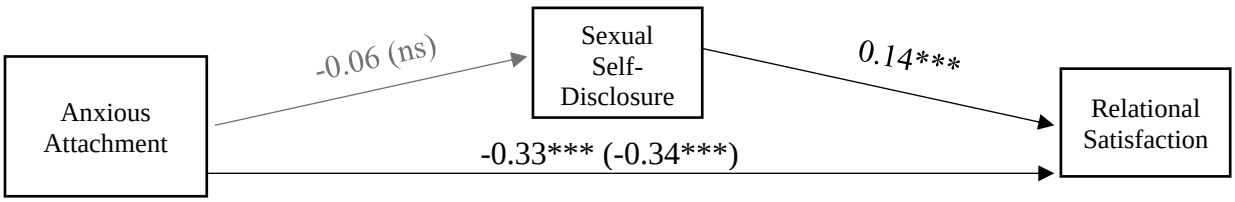
Note: All coefficients in the figure are unstandardized. The direct effect of the avoidant attachment on sexual satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

The first analysis examined the mediating effect of anxious attachment on relational satisfaction through sexual self-disclosure. First, for *X* predicting *Y*, the model examining the relationship between anxious attachment and relational satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 55.85$, $p < .001$, $R^2 = .26$. Anxious attachment did, indeed, predict relational satisfaction. Next, for *X* predicting *M*, the model with anxious attachment as the predictor and sexual frequency as the covariate was significant when predicting sexual self-disclosure, $F(3, 487) = 8.84$, $p < .001$, $R^2 = .05$. However, although the overall model was significant (likely due to the covariate), anxious attachment did not predict sexual self-disclosure. Next, the overall model (containing the independent variable, the

mediator, and the covariate, that is *X* and *M* predicting *Y* together) predicting relational satisfaction was significant, $F(4, 486) = 49.14$, $p < .001$, $R^2 = .29$. Sexual self-disclosure predicted relational satisfaction significantly. The relationship between anxious attachment and relational satisfaction was significant, and slightly smaller (see Figure 5 for path coefficient values). Finally, the indirect effect of anxious attachment on relational satisfaction through sexual self-disclosure was not significant, *ab* = -0.01, *SE* = 0.01, CI: [-0.02 to 0.01]. Therefore, in response to RQ1a, sexual self-disclosure did not mediate the relationship between anxious attachment and relational satisfaction.

Figure 5

Sexual Self-Disclosure Mediation Model Results for Anxious Attachment and Relational Satisfaction (RQ1a)



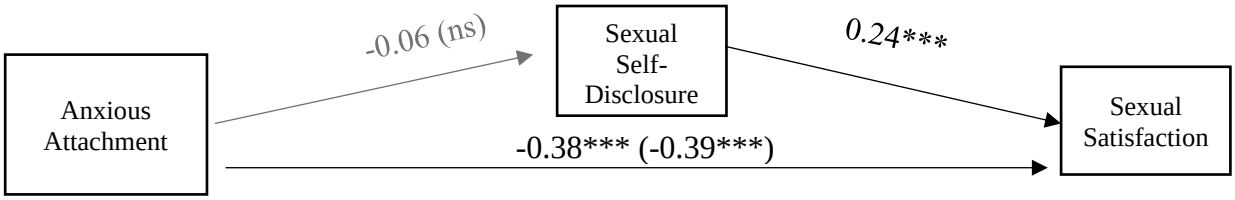
Note: All coefficients in the figure are unstandardized. The direct effect of the anxious attachment on relational satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

Next, the second analysis examined the mediating effect of anxious attachment on sexual satisfaction through sexual self-disclosure. First, for *X* predicting *Y*, the model examining the relationship between anxious attachment and sexual satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 75.70$, $p < .001$, $R^2 = .32$. Anxious attachment did, indeed, predict sexual satisfaction. Next, for *X* predicting *M*, the model with anxious attachment as the predictor and sexual frequency as the covariate was significant when predicting sexual self-disclosure, $F(3, 487) = 8.84$, $p < .001$, $R^2 = .05$. However, although the overall model was significant (likely due to the covariate), anxious attachment did not predict sexual self-disclosure.

Next, the overall model (containing the independent variable, the mediator, and the covariate, that is *X* and *M* predicting *Y* together) predicting sexual satisfaction was significant, $F(4, 486) = 72.90$, $p < .001$, $R^2 = .38$. Sexual self-disclosure predicted sexual satisfaction significantly. The relationship between anxious attachment and sexual satisfaction was still significant, albeit slightly lessened (see Figure 6 for path coefficient values). Finally, the indirect effect of anxious attachment on sexual satisfaction through sexual self-disclosure was not significant, *ab* = -0.01, *SE* = 0.01, CI: [-0.04 to 0.01]. Therefore, in response to RQ1b, sexual self-disclosure did not mediate the relationship between anxious attachment and sexual satisfaction.

Figure 6

Sexual Self-Disclosure Mediation Model Results for Anxious Attachment and Sexual Satisfaction (RQ1b)



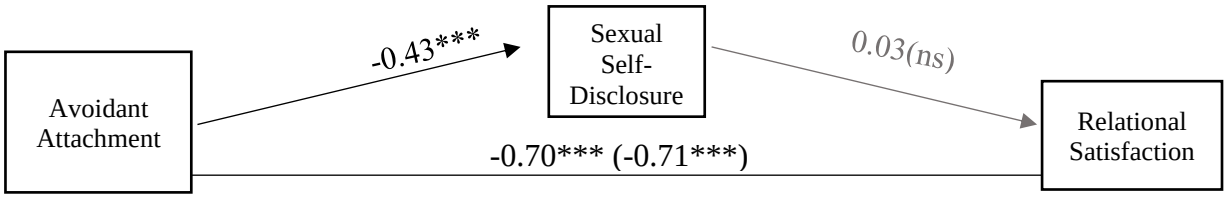
Note: All coefficients in the figure are unstandardized. The direct effect of the anxious attachment on sexual satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

Next, the third analysis examined the mediating effect of avoidant attachment on relational satisfaction through sexual self-disclosure. First, for *X* predicting *Y*, the model examining the relationship between avoidant attachment and relational satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 138.40$, $p < .001$, $R^2 = .46$. Avoidant attachment did, indeed, predict relational satisfaction. Next, for *X* predicting *M*, the model with avoidant attachment as the predictor and sexual frequency as the covariate was significant when predicting sexual self-disclosure, $F(3, 487) = 22.30$, $p < .001$, $R^2 = .12$. The overall model was significant and avoidant attachment did predict sexual self-disclosure. Next,

the overall model (containing the independent variable, the mediator, and the covariate, that is *X* and *M* predicting *Y* together) predicting relational satisfaction was significant, $F(4, 486) = 104.16$, $p < .001$, $R^2 = .46$. Sexual self-disclosure did not predict relational satisfaction significantly, though. The relationship between avoidant attachment and relational satisfaction was still significant, albeit slightly lessened (see Figure 7 for path coefficient values). Finally, the indirect effect of avoidant attachment on relational satisfaction was not significant for sexual self-disclosure, $ab = -0.01$, $SE = 0.01$, CI: [-0.03 to 0.01]. Therefore, in response to RQ1c, sexual self-disclosure did not mediate the relationship between avoidant attachment and relational satisfaction.

Figure 7

Sexual Self-Disclosure Mediation Model Results for Avoidant Attachment and Relational Satisfaction (RQ1c)



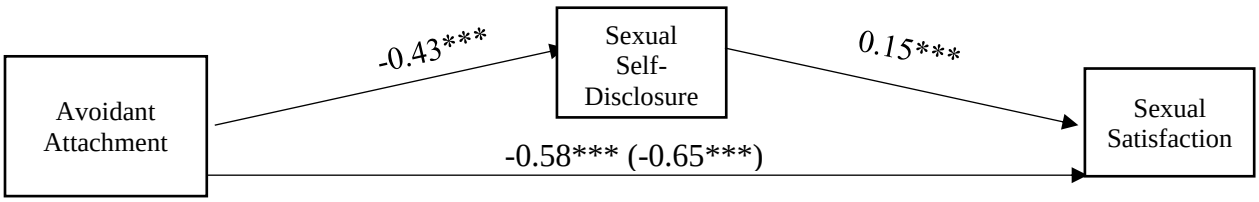
Note: All coefficients in the figure are unstandardized. The direct effect of the avoidant attachment on relational satisfaction (in the presence of the mediator and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

Next, the fourth analysis examined the mediating effect of avoidant attachment on sexual satisfaction through sexual self-disclosure. First, for *X* predicting *Y*, the model examining the relationship between avoidant attachment and sexual satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 97.75$, $p < .001$, $R^2 = .38$. Avoidant attachment did, indeed, predict sexual satisfaction. Next, for *X* predicting *M*, the model with avoidant attachment as the predictor and sexual frequency as the covariate was significant when predicting sexual self-disclosure, $F(3, 487) = 22.30$, $p < .001$, $R^2 = .12$. The overall model was significant, and

avoidant attachment did predict sexual self-disclosure. Next, the overall model (containing the independent variable, the mediator, and the covariate, that is *X* and *M* predicting *Y* together) predicting sexual satisfaction was significant, $F(4, 486) = 80.20$, $p < .001$, $R^2 = .40$. Sexual self-disclosure predicted sexual satisfaction significantly. The relationship between avoidant attachment and sexual satisfaction was still significant, albeit lessened (see Figure 8 for path coefficient values). Finally, the indirect effect of avoidant attachment on relational satisfaction was not significant for sexual self-disclosure, *ab* = -0.01, *SE* = 0.01, CI: [-0.03 to 0.01]. Therefore, in response to RQ1c, sexual self-disclosure did not mediate the relationship between avoidant attachment and relational satisfaction.

Figure 8

Sexual Self-Disclosure Mediation Model Results for Avoidant Attachment and Sexual Satisfaction (RQ1d)



Note: All coefficients in the figure are unstandardized. The direct effect of the avoidant attachment on sexual satisfaction (in the presence of the mediator and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

The final research question (RQ2) explored whether adding sexual self-disclosure as a mediator would change the relationships between antecedents and outcomes, with SCD as mediator. Four separate analyses were conducted in PROCESS version 4.0 (2021), pre-set Model 4, with 10,000 bootstraps, bias-corrected, and accelerated 95% confidence intervals. In each analysis, the two dummy coded sexual frequency variables were entered as covariates. The independent variable (*X*) was one of the attachment styles (i.e., avoidant or anxious), and the four sub-dimensions of SCD (i.e., sexual relationship maintenance, sexual experimentation, sexual

issues, and safe sex), as well as sexual self-disclosure, were entered as mediators (*M*). The dependent variable (*Y*) entered was either relational or sexual satisfaction, depending on which sub-part of the research question was examined.

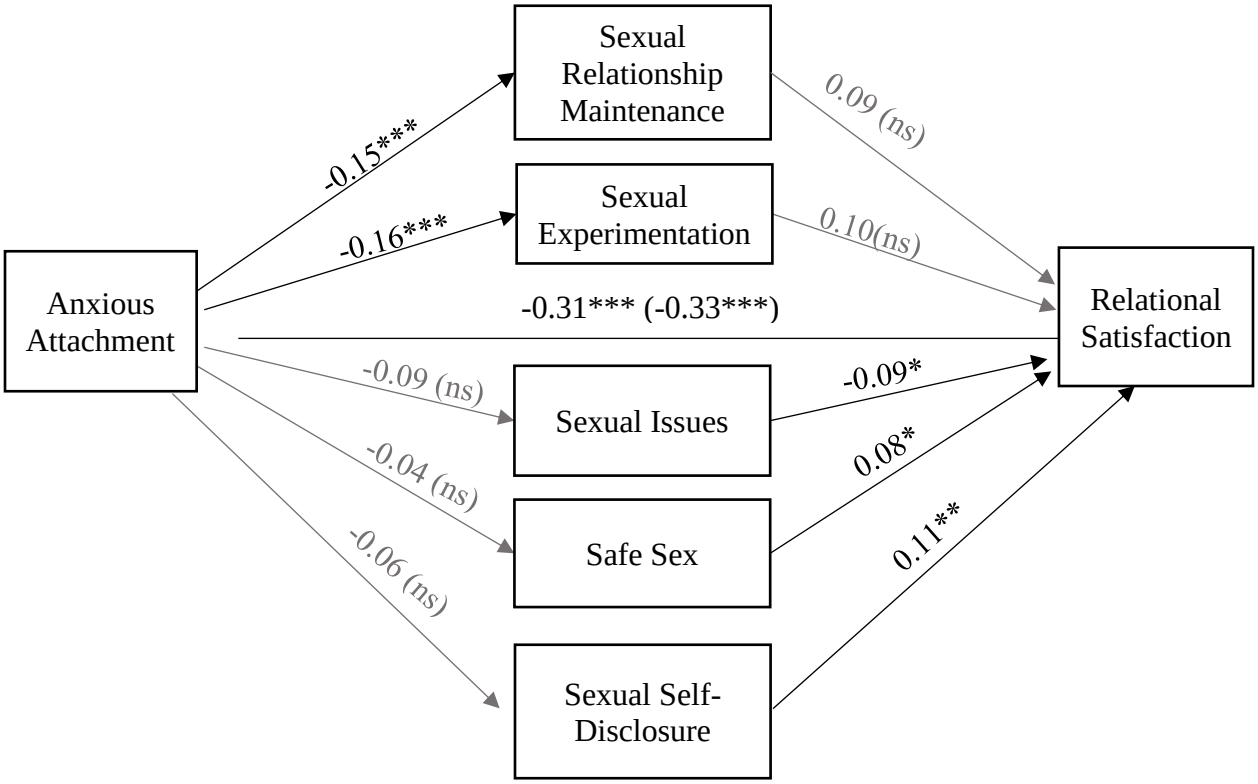
The first analysis examined the mediating effects of anxious attachment on relational satisfaction, through the four SCD sub-dimensions and sexual self-disclosure. First, for *X* predicting *Y*, the model examining the relationship between anxious attachment and relational satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 55.85$, $p < .001$, $R^2 = .26$. Anxious attachment did, indeed, predict relational satisfaction. Next, for *X* predicting *M*, the models with anxious attachment as the predictor and sexual frequency as the covariate were significant when predicting sexual relationship maintenance, $F(3, 487) = 35.74$, $p < .001$, $R^2 = .18$, sexual experimentation, $F(3, 487) = 22.87$, $p < .001$, $R^2 = .12$, sexual issues, $F(3, 487) = 9.80$, $p < .001$, $R^2 = .06$, safe sex, $F(3, 487) = 3.28$, $p < .05$, $R^2 = .02$, and sexual self-disclosure, $F(3, 487) = 8.84$, $p < .001$, $R^2 = .05$. For the first two models, anxious attachment also significantly predicted sexual relationship maintenance and sexual experimentation. For the last three models, albeit the overall models were significant (likely due to the covariate), anxious attachment did not predict sexual issues, safe sex, or sexual self-disclosure. Next, the overall model (containing the independent variable, the five mediators, and the covariate, that is *X* and *M* predicting *Y* together) predicting relational satisfaction was significant, $F(8, 482) = 28.75$, $p < .001$, $R^2 = .32$. Sexual issues, safe sex, and sexual self-disclosure predicted relational satisfaction significantly. The relationship between anxious attachment and relational satisfaction was still significant, although slightly lessened (see Figure 9 for path coefficient values). Finally, the indirect effects of anxious attachment on relational satisfaction were not significant for any of the mediators, sexual relational maintenance, $ab = -0.01$, $SE = 0.01$, CI: [-0.04 to 0.01], sexual

experimentation, *ab* = -0.02, *SE* = 0.01, CI: [-0.04 to 0.002], sexual issues, *ab* = 0.01, *SE* = 0.01, CI: [-0.01 to 0.02], safe sex, *ab* = -0.01, *SE* = 0.01, CI: [-0.02 to 0.01], sexual self-disclosure, *ab* = -0.01, *SE* = 0.01, CI: [-0.02 to 0.01].

The analysis revealed that the strength and direction of the coefficients between anxious attachment and the four sub-dimensions of SCD remained identical after adding sexual self-disclosure. The relationships between the four sub-dimensions of SCD and relational satisfaction were slightly affected by the addition of sexual self-disclosure as a mediator.

Figure 9

Mediation Model Results for Anxious Attachment and Relational Satisfaction (RQ2a)



Note: All coefficients in the figure are unstandardized. The direct effect of anxious attachment on relational satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

The addition of sexual self-disclosure changed the significance of the coefficient between sexual experimentation and relational satisfaction, from 0.10, $p < .05$, to 0.10, $p > .05$. However, this

was the only noteworthy change. None of the mediators were significant. Therefore, the results suggest that the addition of sexual self-disclosure to the mediation had minimal effects on the model, suggesting that sexual self-disclosure was a non-significant, negligible addition as a mediator.

The second analysis tested the mediating effects of the four SCD sub-dimensions and sexual self-disclosure on the relationship between anxious attachment and sexual satisfaction. First, the model in which anxious attachment predicted sexual satisfaction (while controlling for sexual frequency; *X* predicting *Y*) was significant, $F(3, 487) = 75.70$, $p < .001$, $R^2 = .32$. Anxious attachment did, indeed, predict sexual satisfaction. Second, for *X* predicting *M*, the models with anxious attachment as the predictor and sexual frequency as the covariate were significant when predicting sexual relationship maintenance, $F(3, 487) = 35.74$, $p < .001$, $R^2 = .18$, sexual experimentation, $F(3, 487) = 22.87$, $p < .001$, $R^2 = .12$, sexual issues, $F(3, 487) = 9.80$, $p < .001$, $R^2 = .06$, safe sex, $F(3, 487) = 3.28$, $p < .05$, $R^2 = .02$, and sexual self-disclosure, $F(3, 487) = 8.84$, $p = .00$, $R^2 = .05$. For the first two models, anxious attachment also significantly predicted sexual relationship maintenance and sexual experimentation. For the last three models, although the overall models were significant (likely due to the covariate), anxious attachment did not predict sexual issues, safe sex, or sexual self-disclosure. Next, the overall model (containing the independent variable, the five mediators, and the covariate; *X* and *M* predicting *Y*) predicting sexual satisfaction was significant, $F(8, 482) = 57.29$, $p < .001$, $R^2 = .49$. Sexual relationship maintenance, sexual experimentation, sexual issues, and sexual self-disclosure predicted sexual satisfaction significantly. Anxious attachment continued to predict sexual satisfaction as well, albeit to a lesser extent (see Figure 10 for path coefficient values). Finally, the indirect effects of anxious attachment on sexual satisfaction were significant for both sexual relationship

maintenance, *ab* = -0.07, *SE* = 0.02, CI: [-0.11 to -0.03], and sexual experimentation, *ab* = -0.02, *SE* = 0.01, CI: [-0.05 to -0.002]. However, the indirect effects of anxious attachment on sexual satisfaction were not significant for sexual issues, *ab* = 0.01, *SE* = 0.01, CI: [-0.001 to 0.03], safe sex, *ab* = -0.01, *SE* = 0.003, CI: [-0.01 to 0.01], or sexual self-disclosure, *ab* = -0.01, *SE* = 0.01, CI: [-0.02 to 0.01].

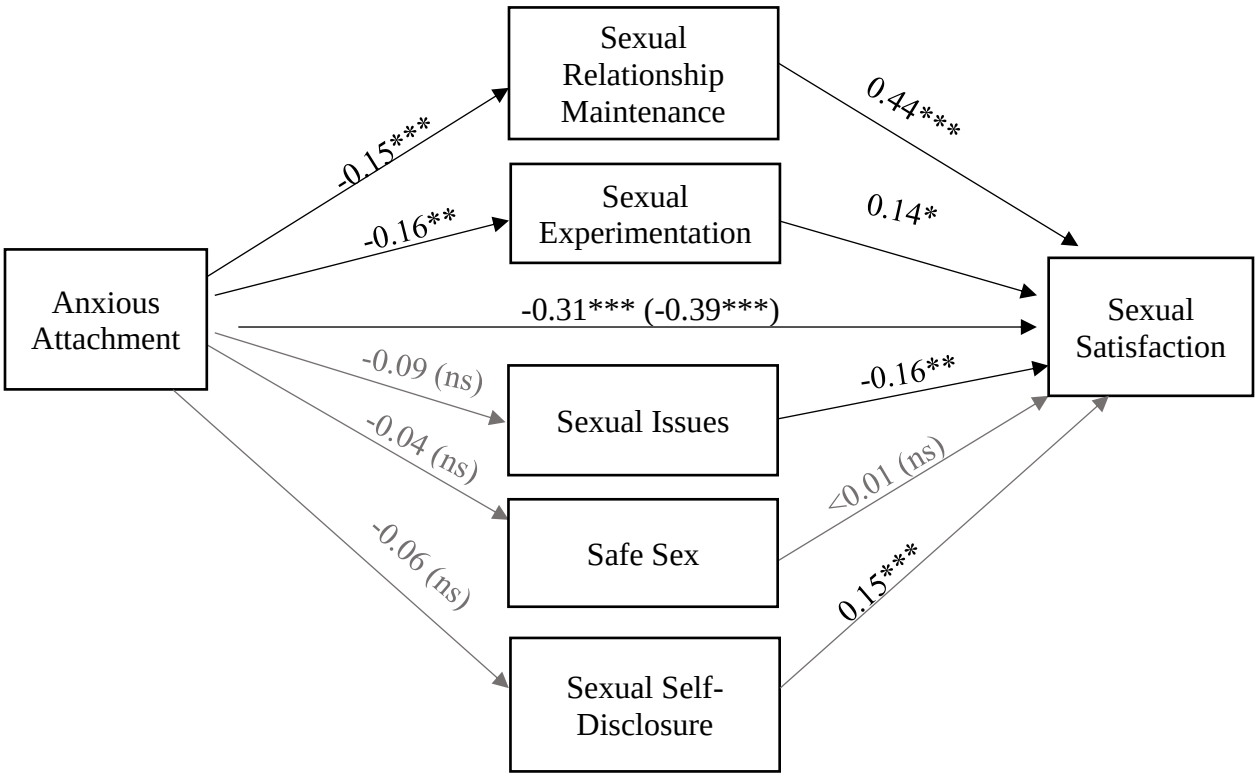
The analysis revealed the strength and direction of the coefficients between anxious attachment and the four sub-dimensions of SCD remained the same after adding sexual self-disclosure. However, the relationships between the four sub-dimensions of SCD and sexual satisfaction were only minorly affected by the addition of sexual self-disclosure, with no significant changes. For example, the coefficients for the relationships between sexual relationship maintenance and sexual satisfaction decreased from 0.49, $p < .001$, to 0.44, $p < .001$, as well as sexual experimentation and sexual satisfaction decreasing from 0.15, $p < .05$, to 0.14, $p < .05$, once sexual self-disclosure was added to the model. Overall, the addition of sexual self-disclosure resulted in minor changes for the mediation model tested, with no significant changes for the significant mediations previously identified between anxious attachment and sexual satisfaction, via the two sub-dimensions of SCD (sexual relationship maintenance and sexual experimentation).

Next, the third analysis tested the mediating effects of avoidant attachment on relational satisfaction, through the four SCD sub-dimensions and sexual self-disclosure. First, for *X* predicting *Y*, the model examining the relationship between avoidant attachment and relational satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 138.40$, $p < .001$, $R^2 = .46$. Avoidant attachment did, indeed, predict relational satisfaction. Next, for *X* predicting *M*, the models with avoidant attachment as the predictor and sexual frequency as the

covariate were significant when predicting sexual relationship maintenance, $F(3, 487) = 41.69$, $p < .001$, $R^2 = .20$, sexual experimentation, $F(3, 487) = 26.60$, $p < .001$, $R^2 = .14$, sexual issues, $F(3, 487) = 8.60$, $p < .001$, $R^2 = .05$, safe sex, $F(3, 487) = 3.09$, $p = .03$, $R^2 = .02$, and sexual self-disclosure, $F(3, 487) = 22.30$, $p < .001$, $R^2 = .12$.

Figure 10

Mediation Model Results for Anxious Attachment and Sexual Satisfaction (RQ2b)



Note: All coefficients in the figure are unstandardized. The direct effect of the anxious attachment on sexual satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

For three of the models, avoidant attachment predicted sexual relationship maintenance, sexual experimentation, and sexual self-disclosure. For the final two models, albeit the overall models were significant (likely due to the covariate), avoidant attachment did not predict sexual issues or safe sex. Next, the overall model (containing the independent variable, the five mediators, and the covariate, that is *X* and *M* predicting *Y* together) predicting relational satisfaction was

significant, $F(8, 482) = 56.73$, $p < .001$, $R^2 = .49$. Safe sex predicted relational satisfaction significantly. The relationship between avoidant attachment and relational satisfaction was still significant, albeit lessened (see Figure 11 for path coefficient values). Finally, the indirect effects were not significant for sexual relational maintenance, *ab* = -0.01, *SE* = 0.02, CI: [-0.04 to 0.03], sexual experimentation, *ab* = 0.02, *SE* = 0.01, CI: [-0.05 to 0.01], sexual issues, *ab* = 0.01, SE = 0.03, CI: [-0.01 to 0.01], safe sex, *ab* = -0.01, *SE* = 0.01, CI: [-0.02 to 0.01], and sexual self-disclosure, *ab* = -0.01, *SE* = 0.01, CI: [-0.03 to 0.01].

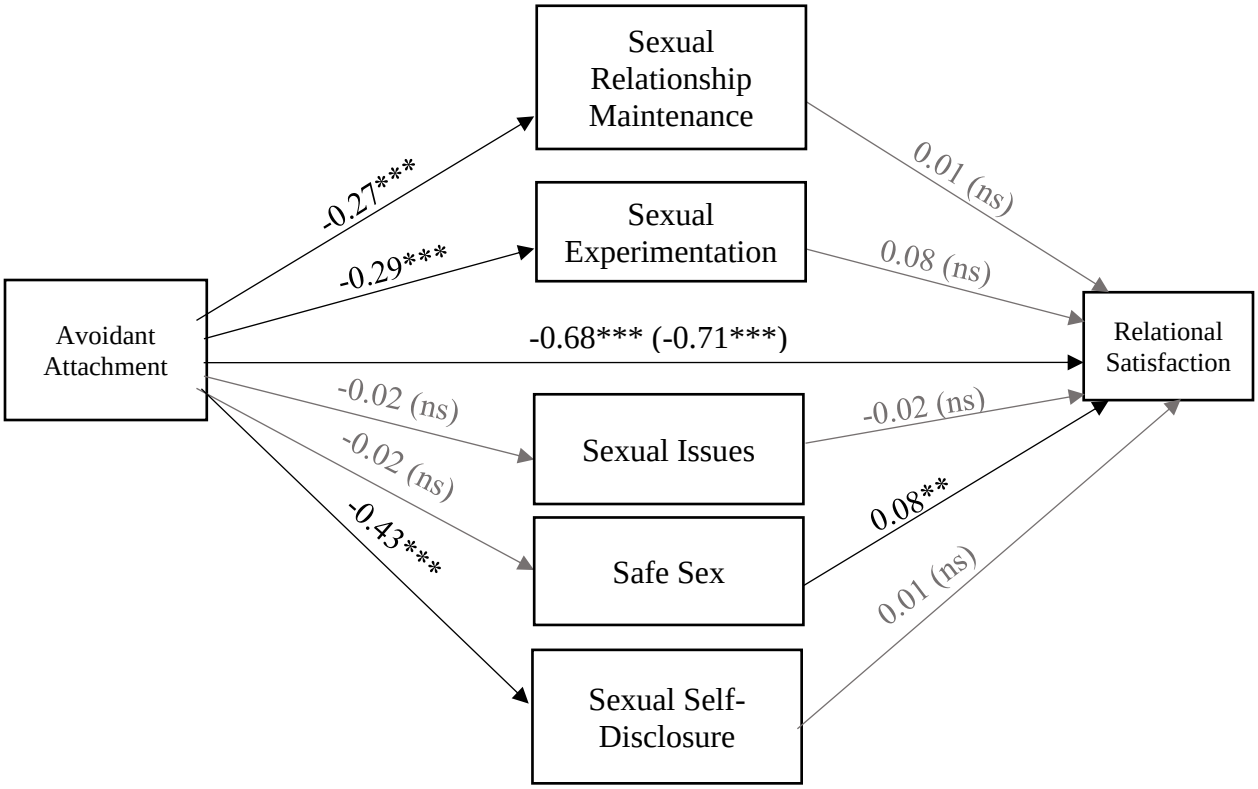
The analysis revealed that the strength and direction of the coefficients between avoidant attachment and the four sub-dimensions of SCD remained identical after adding sexual self-disclosure to the model. In addition, the coefficient for the relationship between sexual relationship maintenance and relational satisfaction did not change in strength, significance, nor direction with the addition of sexual self-disclosure. However, the relationships between the three remaining sub-dimensions of SCD and relational satisfaction were slightly affected by the addition of sexual self-disclosure. For example, the coefficient for the relationship between safe sex and relational satisfaction decreased from 0.08, $p < .01$, to 0.08, $p < .05$, once sexual self-disclosure was added to the model. None of these minor changes were significant, though. Nor were there any significant mediations between avoidant and relational satisfaction, through any of the mediation variables, including the newly added sexual self-disclosure variable. Therefore, the results suggest that the addition of sexual self-disclosure to the mediation did not affect the mediation model with SCD sub-dimensions as mediators in any substantive ways.

Lastly, the fourth analysis examined the mediating effects of avoidant attachment on sexual satisfaction, through the four SCD sub-dimensions and sexual self-disclosure. First, for *X* predicting *Y*, the model examining the relationship between avoidant attachment and sexual

satisfaction (while controlling for sexual frequency) was significant, $F(3, 487) = 97.75$, $p < .001$, $R^2 = .38$. Avoidant attachment did, indeed, predict sexual satisfaction. Next, for *X* predicting *M*, the models with avoidant attachment as the predictor and sexual frequency as the covariate were

Figure 11

Mediation Model Results for Avoidant Attachment and Relational Satisfaction (RQ2c)



Note: All coefficients in the figure are unstandardized. The direct effect of the avoidant attachment on relational satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

significant when predicting sexual relationship maintenance, $F(3, 487) = 41.69$, $p < .001$, $R^2 = .20$, sexual experimentation, $F(3, 487) = 26.60$, $p < .001$, $R^2 = .14$, sexual issues, $F(3, 487) = 8.60$, $p < .001$, $R^2 = .05$, safe sex, $F(3, 487) = 3.09$, $p = .03$, $R^2 = .02$, and sexual self-disclosure, $F(3, 487) = 22.30$, $p < .001$, $R^2 = .12$. For three of the models, avoidant attachment significantly predicted sexual relationship maintenance, sexual experimentation, and sexual self-disclosure. For the remaining two models, although the overall models were significant (like due to the

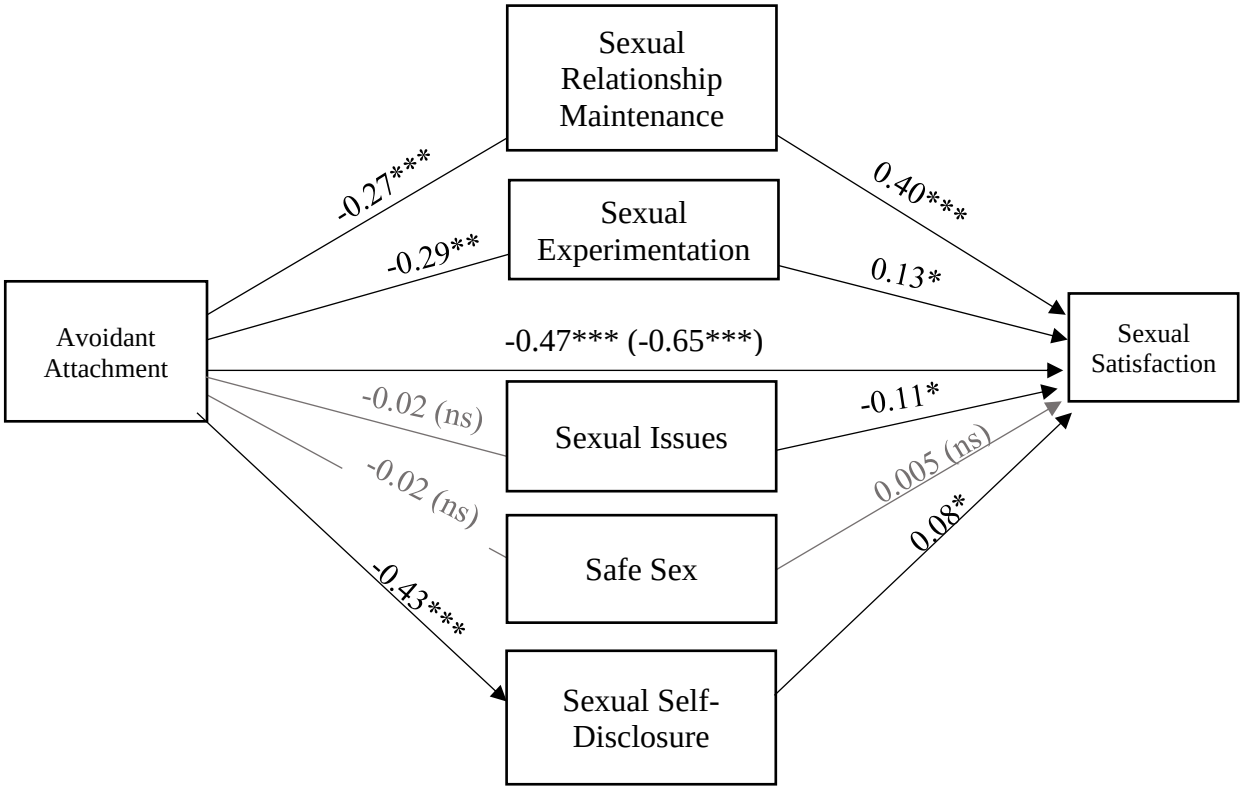
covariate), avoidant attachment did not predict sexual issues or safe sex. Next, the overall model (containing the independent variable, the five mediators, and the covariate; *X* and *M* predicting *Y*) predicting sexual satisfaction was significant, $F(8, 482) = 59.48$, $p < .001$, $R^2 = .50$. Sexual relationship maintenance, sexual experimentation, and sexual self-disclosure significantly predicted sexual satisfaction. The relationship between avoidant attachment and sexual satisfaction was still significant, although lessened (see Figure 12 for path coefficient values). Finally, the indirect effects of avoidant attachment on sexual satisfaction were significant for both sexual relationship maintenance, *ab* = -0.11, *SE* = 0.03, CI: [-0.17 to -0.05], sexual experimentation, *ab* = -0.04, *SE* = 0.02, CI: [-0.08 to -0.004], and sexual self-disclosure, *ab* = -0.04, *SE* = 0.02, CI: [-0.07 to -0.01]. However, the indirect effects of avoidant attachment on sexual satisfaction were not significant for either sexual issues, *ab* = 0.002, *SE* = 0.01, CI: [-0.01 to 0.02], or safe sex, *ab* = -0.0001, *SE* = 0.003, CI: [-0.01 to 0.01].

The analysis revealed the strength and direction of the coefficients between avoidant attachment and the four sub-dimensions of SCD remained the same after adding sexual self-disclosure (see Table 15). In addition, the coefficients for the relationship between sexual issues and sexual satisfaction, as well as safe sex and sexual satisfaction, did not change in strength, significance, nor direction with the addition of sexual self-disclosure to the model. Yet, the relationships between the remaining sub-dimensions of SCD and sexual satisfaction were slightly affected by the addition of sexual self-disclosure. For example, the coefficient for the relationship between sexual relationship maintenance and sexual satisfaction decreased from 0.42, $p = .001$, to 0.40, $p = .001$, once sexual self-disclosure was added to the model; similarly, the strength of the coefficient for the relationship between sexual experimentation and sexual satisfaction decreased from 0.13, $p < .05$, to 0.13, $p > .05$, once sexual self-disclosure was added

to the model. Lastly, the addition of sexual self-disclosure changed the direct effect of avoidant attachment on sexual satisfaction slightly, decreasing its value from -0.50 in the model with only SCD mediators to -0.47 when sexual self-disclosure was added. Therefore, the results suggest that the addition of sexual self-disclosure to the mediation had some minor yet notable effects on the mediation model. In other words, sexual self-disclosure added some information as a mediator in the relationships between avoidant attachment and sexual satisfaction.

Figure 12

Mediation Model Results for Avoidant Attachment and Sexual Satisfaction (RQ2d)



Note: All coefficients in the figure are unstandardized. The direct effect of the avoidant attachment on sexual satisfaction (in the presence of the mediators and covariates) is listed on the path, whereas its total effect (only *X* and the covariates) is listed on the same path in parentheses.

Sexual Frequency

Although not the focus of this dissertation, the significant covariate identified during the preliminary MANOVA revealed some interesting results that are worth mentioning. For

example, within the regression analyses, participants who reported rare sexual frequency (i.e., a sexual frequency of zero to two times within the past 12 months), when compared to participants who had sex at least monthly, had more negative SCD scores on all four SCD sub-dimensions: for sexual relationship maintenance, $R^2 = .15$, $F(2, 488) = 43.60$, $p < .001$, $b = -1.58$, $\beta = -0.40$, $p < .001$, for sexual experimentation, $R^2 = .10$, $F(2, 488) = 27.00$, $p < .01$, $b = -1.16$, $\beta = -0.35$, $p < .001$; for sexual issues, $R^2 = .05$, $F(2, 488) = 12.88$, $p < .001$, $b = 0.55$, $\beta = -0.25$, $p < .001$; and for safe sex, $R^2 = .01$, $F(2, 488) = 4.60$, $p = .01$, $b = -0.96$, $\beta = -0.18$, $p < .001$ (see Table 16). In other words, low sexual frequency related to negative SCD scores on all four sub-dimensions (that is, expectations that were not met via actual communication in participants' sexual relationship). Similarly, during additional regression analyses, rare sexual frequency was negatively predictive of sexual self-disclosure, $R^2 = .05$, $F(2, 488) = 12.66$, $p < .001$, $b = -1.66$, $\beta = -0.33$, $p < .001$. Therefore, the results suggest that low sexual frequency negatively predicts sexual self-disclosure, meaning that individuals who rarely engage in sex tend to sexually self-disclose less than those who engage in sex at least monthly. Furthermore, the regression analyses revealed that rare sexual frequency also predicted relational satisfaction negatively (see Tables 11 - 12 for coefficients). Thus, rare sexual frequency (as compared to at least monthly) is associated with decreased relational and sexual satisfaction among partnered individuals.

In sum, the results of this study found that avoidant attachment negatively predicted the sexual relationship maintenance and sexual experimentation factors of SCD, which partially supported H2. The results also revealed that sexual relationship maintenance, sexual experimentation, and safe sex positively predicted, and sexual issues negatively predicted, relational satisfaction, partially supporting H3. Similarly, sexual relationship maintenance and sexual experimentation positively predicted sexual satisfaction, with safe sex negatively

predicting sexual satisfaction, offering partial support for H4. The results provided full support for H5 as both the anxious and avoidant attachment styles significantly and negatively predicted relational satisfaction. Likewise, H6 was supported as both and avoidant attachment styles significantly and negatively predicted sexual satisfaction. The mediation analyses revealed that sexual relationship maintenance and sexual experimentation partially mediated the relationships between anxious attachment and sexual satisfaction, as well as between avoidant attachment and sexual satisfaction, offering partial support for H7. The results also revealed that sexual self-disclosure mediated the relationship between avoidant attachment and sexual satisfaction, in response to RQ1. Lastly, the results of RQ2 revealed that the addition of sexual self-disclosure to the mediation models did not yield any substantial changes, except in the case of avoidant attachment and sexual satisfaction for the mediation models with the four SCD sub-dimensions as mediators.

Table 15

Comparison of SCD Mediation with and without Sexual Self-Disclosure

	Mediation without sexual self-disclosure			**Mediation with sexual self-disclosure**		
	ab	*SE*	CI	*ab*	*SE*	CI
ANX→SRM→RS	-0.02	0.01	-0.05; 0.01	-0.01	0.01	-0.04; 0.01
ANX→SRM→ SS	-0.07*	0.02	-0.12; -0.03	-0.07*	0.02	-0.11; 0.03
AVD→SRM→ RS	-0.004	0.02	-0.04; 0.03	-0.01	0.02	-0.04; 0.03
AVD→SRM→ SS	-0.12*	0.03	-0.18; -0.06	-0.11*	0.03	-0.17; -0.05
ANX→SE→RS	-0.02	0.01	-0.04; 0.01	-0.02	0.01	-0.04; 0.002
ANX→SE→ SS	-0.02*	0.01	-0.05; -0.003	-0.02*	0.01	-0.05; -0.002
AVD→SE→ RS	-0.02	0.01	-0.06; 0.003	-0.02	0.01	-0.05; 0.01
AVD→SE→ SS	-0.04*	.02	-0.09; -0.001	-0.04*	0.02	-0.08; -0.004
ANX→SI→RS	0.01	0.01	-0.001; 0.02	0.01	0.01	-0.01; 0.02
ANX→SI→ SS	.01	.01	-0.01; 0.03	0.01	0.01	-0.001; 0.03
AVD→SI→ RS	0.01	0.01	-0.01; 0.01	0.01	0.03	-0.01; 0.01
AVD→SI→ SS	0.002	0.002	-0.01; 0.02	0.002	0.01	-0.01; 0.02
ANX→SFS→RS	-0.01	0.01	-0.02; 0.01	-0.01	0.01	-0.02; 0.01
ANX→SFS→ SS	-0.01	0.01	-0.01; 0.01	-0.01	0.01	-0.02; 0.01
AVD→SFS→ RS	-0.01	0.01	-0.02; 0.01	-0.01	0.01	-0.03; 0.01
AVD→SFS→ SS	-0.0001	0.003	-0.01; 0.01	-0.0001	0.003	-0.01; 0.01
ANX→SSD→RS				-0.02	0.01	-0.03; 0.01
ANX→ SSD→ SS				-0.01	0.01	-0.04; 0.01
AVD→ SSD→ RS				-0.01	0.01	-0.03; 0.01
AVD→ SSD→ SS				-0.01	0.01	-0.03; 0.01

Note: * signifies a significant mediation. ANX = anxious attachment, AVD = avoidant attachment, SRM = sexual relationship maintenance, SE = sexual experimentation, SI = sexual issues, SFS = safe sex factors, SSD = sexual self-disclosure, RS = relational satisfaction, and SS = sexual satisfaction.

Table 16

MANOVA Results for Sexual Frequency and SCD Variables

Dependent variable	Rare Sexual Frequency		Monthly Sexual Frequency		Weekly Sexual Frequency		*F*-test (2, 428)	partial η^2
	M	*SE*	*M*	*SE*	*M*	*SE*		
SCD. Sexual relationship maintenance	4.00[a]	0.17	4.93[a]	0.12	5.47[a]	0.10	47.12***	.18
SCD. Sexual experimentation	3.81[a]	0.23	4.75[a]	0.15	5.24[a]	0.13	25.26***	.11
SCD. Sexual issues	4.14[a,b]	0.25	5.07[a]	0.16	5.14[b]	0.14	9.80***	.04
SCD. Safe sex	4.52	0.28	4.89	0.19	5.09	0.16	2.62	.01

Notes: *** $p < .001$.

Means with the same subscript in the same row are significantly different, $p < .05$.

Chapter 5: DISCUSSION

This dissertation study aimed to extend understanding of SCD by examining individual characteristics that influence SCD, as well as identifying relational and sexual health outcomes associated with SCD. Specifically, the study focused on the potential role of the four sub-dimensions of SCD as mediators in several relationships previously examined in research between antecedents (i.e., attachment styles) and outcomes (i.e., relational and sexual satisfaction) in sexual communication. The study also compared the mediating role of SCD and an already well-studied variable in the sexual communication literature, sexual self-disclosure.

Sexual communication research has extensively focused on sexual self-disclosure, as it has been found to be influential to one's sexual wellbeing. For example, studies have revealed that sexual self-disclosure is predictive of sexual satisfaction (Jones et al., 2018; Mark & Jozkowski, 2013; Thomas et al., 2015), sexual function (McCarthy & Fucito, 2005; Muin et al., 2015), and orgasm (Kelly et al., 2004; McCarthy & Fucito, 2005). As such, this dissertation relied on past studies on sexual self-disclosure to inform adding the concept to this current study and to examine whether sexual self-disclosure may mediate the relationship between anxious attachment and relational satisfaction, anxious attachment and sexual satisfaction, avoidant attachment and relational satisfaction, and avoidant attachment style and sexual satisfaction (RQ1). This study's findings revealed that sexual self-disclosure did not mediate the relationships between anxious attachment and relational or sexual satisfaction, nor did it mediate the relationship between avoidant attachment and relational satisfaction. It did partially mediate the relationship between avoidant attachment and sexual satisfaction. As such, findings from this research question suggested that sexual self-disclosure was limited in its ability to explain the

process through which anxious attachment was related to relational and sexual satisfaction, as well as avoidant attachment's relationship with relational satisfaction.

This study also compared sexual self-disclosure and SCD as mediators of the relationships between attachment styles and relational and sexual satisfaction (RQ2). Sexual self-disclosure partially mediated only the relationship between the anxious attachment style and sexual satisfaction. When tested together with SCD, sexual self-disclosure had minimal contributions to the mediating relationships already found between attachment styles and sexual satisfaction. Thus, the results of this study revealed that sexual self-disclosure was a negligible mediator and that SCD may serve as an equally, if not more valuable, concept to examine in order to understand and predict sexual communication behaviors.

Furthermore, as proposed, sexual self-disclosure was found to relate to SCD, but the two constructs are nevertheless, distinct ones. A correlational analysis revealed that sexual self-disclosure was moderately correlated with sexual relationship maintenance ($r = .34$, $p < .01$), and weakly correlated with sexual experimentation ($r = .28$, $p < .01$), sexual issues ($r = .22$, $p < .01$), and safe sex ($r = .12$, $p < .01$). Thus, although there are some similarities between the two concepts, SCD is unique from sexual self-disclosure. Therefore, the rest of this discussion will focus on this new concept, SCD, and the results of the current dissertation in respect to its mediating role in the relationships between the antecedents and outcomes associated with sexual communication behaviors.

First, the findings of this dissertation contribute to knowledge about SCD, informed by social science theories that can help understand what may lead to such discrepancies. Guided by attachment theory (Bowlby, 1973, 1980), I proposed several hypotheses regarding the role of avoidant and anxious attachment in the generation of SCD. Specifically, it was hypothesized that

one's avoidant attachment be associated would lower expectations for sexual communication behaviors, and thus, make positive SCD more likely. However, analyses revealed that avoidant attachment negatively predicted the sexual relational maintenance and sexual experimentation sub-dimensions of SCD. Although the direction of this relationship was opposite of what was hypothesized, the results can be understood by synthesizing past work on avoidant attachment.

Specifically, other attributes of one's avoidance may have a strong effect on sexual communication behaviors. For instance, individuals with high avoidant attachment are characterized by a preference to maintain emotional distance and are uncomfortable with relational closeness (Lopez Portillo, 2020; Simpson & Rholes, 2017). Moreover, the same individuals typically exhibit low levels of affectionate communication (Dillow et al., 2014; Hesse & Trask, 2014), displaying inadequate communication patterns (Ainsworth et al., 1978; Lopez Portillo, 2020). In other words, highly avoidant individuals avoid opportunities to engage in communication behaviors that may lead to feelings of relational closeness and, instead, prefer to keep their emotional distance within a relationship. However, scholarship has demonstrated that self-disclosure is a common vehicle for improving relational closeness. For example, general self-disclosure leads to relational closeness (Sprecher et al., 2013). Furthermore, sexual self-disclosure is also strongly associated with relational closeness and intimacy (Byers, 2005; Coffelt & Hess, 2014; Hess & Coffelt, 2012; Kuang & Gettings, 2021). Recent studies have found that high avoidance negatively predicted expectations for sexual self-disclosure (Machette & Drouin, 2023). Considering the results of this study, it appears that one's avoidant attachment not only influences their expectations for sexual communication, but it also motivates individuals to avoid such communication within their relationship. For example, individuals may have lower expectations for sexual communication due to their perception of the risks associated with such

behaviors, such as getting too close to their partner or being judged by their partner (Machette & Drouin, 2023). However, these findings suggest that avoidance is also inhibiting sexual communication from taking place within the relationship, as past work has highlighted avoidant individuals' preference for limiting communication that may reduce emotional closeness (Lopez Portillo, 2020; Simpson & Rholes, 2017). Therefore, these findings suggest that one's avoidance not only negatively predicts their expectations for sexual communication, but also negatively predicts SCD, as avoidant individuals' tendency to avoid sexual self-disclosure inhibits them from meeting their own expectations for sexual communication behaviors within a relationship.

Second, in respect to the anxious attachment style, it was also hypothesized that one's anxious attachment would increase SCD. Results regarding this attachment style are somewhat complex. When tested separately as the only predictors of SCD, anxious attachment negatively predicted both the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD. In other words, as one's anxious attachment increased, their expectations for discussing topics such as sexual preferences and what feels pleasurable (i.e., the sexual relationship maintenance sub-dimension), as well as topics such as sexual fantasies and talking dirty (i.e., the sexual experimentation sub-dimension) became increasing unmet. However, when both attachment variables were included together within the same regressions, anxious attachment was no longer a significant predictor of any sub-dimensions of SCD. Therefore, the results suggest that, individually, each of the attachment styles may predict SCD. However, the anxious attachment's influence on SCD was no longer significant in the presence of the avoidant attachment style. Thus, collectively, it appears that the avoidant attachment style may be the more important predictor of SCD of the two.

Findings from this study also contribute to the growing work on the relational and sexual outcomes associated with one's attachment styles. Past studies have revealed that anxious and avoidant attachment have been negatively predictive of both relational and sexual satisfaction in dating and married individuals (Butzer & Campbell, 2008; Mark et al., 2018; Timm & Keiley, 2011). In other words, as individuals' anxious or avoidant attachment increases, their relational and sexual satisfaction decrease. The results of this dissertation revealed that relational satisfaction was negatively predicted by both anxious and avoidant attachment, which corroborates past findings. Similarly, the study echoes past findings by revealing that sexual satisfaction was negatively predicted by the anxious and avoidant attachment styles. Therefore, the results of this study add knowledge to decades of past work that has highlighted the negatively predictive relationship between one's attachment style and relational and sexual satisfaction (Butzer & Campbell, 2008; Mark et al., 2018; Timm & Keiley, 2011). Taken together, these results reiterate the important role that attachment plays in predicting both relational and sexual satisfaction, which are critical to one's relational wellbeing. As such, these findings may prove useful for relational therapists for understanding the importance of increasing the secure attachment of individuals in their relationships as a way to promote more satisfying bonds.

This study also contributes to our understanding of the outcomes of SCD. Guided by EVT (Burgoon, 1978, 1985; Burgoon & Jones, 1976), I proposed that SCD would predict relational and sexual satisfaction positively. The results revealed that the sexual relationship maintenance, sexual experimentation, and safe sex sub-dimensions of SCD positively predicted relational satisfaction. Similarly, the same sub-dimensions positively predicted sexual satisfaction. That is, as individuals engaged in more sexual communication about their sexual

preferences (e.g., preferred sexual positions, what they find pleasurable), sexual novelty (e.g., dirty talk, sexual fantasies, fetishes), and safe sex practices (e.g., preventing the spread of sexually transmitted infections, the risk of pregnancy), their relational and sexual satisfaction increased. Such findings build on emerging work on the outcomes predicted by SCD. For example, Machette (2022a) found that SCD was positively associated with both relational and sexual satisfaction in a sample of married individuals. Furthermore, another recent study found that the relationship maintenance, sexual experimentation, and safe sex sub-dimensions of SCD predicted both relational and sexual satisfaction in both women and men (Machette & Montgomery-Vestecka, 2023a). Therefore, the findings of this dissertation study corroborate recent work regarding the outcomes predicted by SCD. Furthermore, these findings can be understood through the lens of EVT, in that individuals may perceive conversations about topics such as preferred sexual positions, sexual fantasies, and safe sex that happen more often than expected as a positive violation of their expectations. Therefore, these individuals may perceive their relationship to be more satisfying. Furthermore, these conversations likely lead to a more satisfying sex life as the partners are able to educate one another on their sexual preferences, fantasies, and more (Hess & Coffelt, 2012; Machette et al., 2022; MacNeil & Byers, 2005). Thus, the results of this study, when synthesized with emerging literature and theoretical considerations, suggest that, when individuals engage in more conversations about their sexual preferences, sexual novelty, and safe sex practices, beyond their expectations, their relational and sexual satisfaction increase. Such findings offer valuable insight into the realm of clinical treatment of low relational and sexual satisfaction by focusing on increasing one's positive SCD. It should also be recognized that, in comparison to sexual satisfaction, the sub-dimensions of SCD did not predict relational satisfaction very well. Consequently, such findings may suggest

that SCD works best as a predictor of sexual health outcomes, such as sexual satisfaction, sexual function, and similar concepts, as demonstrated in past studies (Machette, 2022a; Machette & Montgomery-Vestecka, 2023a; Machette & Montgomery-Vestecka, 2023b).

Furthermore, results revealed that the sexual issues sub-dimension of SCD negatively predicted relational and sexual satisfaction. In other words, the more individuals engaged in discussions about sexual challenges and issues beyond their expectations, the more relational and sexual satisfaction decreased. This dissertation is the first to examine each of the sub-dimensions of SCD and their predictive relationship with relational satisfaction. Results of this study and recent research (Machette & Montgomery-Vestecka, 2022b) suggest that individuals report lower satisfaction when their relational communication exceeds their expectations for discussing sexual issues, such as sexual dysfunction or other sexual problems faced. Guided by EVT, one explanation for such findings is that individuals view such exceeded expectations as a negative violation, and that such evaluations lead to decreases in relational and sexual satisfaction. For instance, individuals may perceive talking about their sexual issues beyond their expectations to be a negative violation because they do not want to talk about a vulnerable and sensitive topic, such as their own challenges in the bedroom. As such, discussing one's sexual issues with their partner beyond expectations may, in turn, result in a less satisfying relationship and sex life, because such discussions become a frustrating experience within the relationship. Taken together, through the lens of EVT, the results suggest that, when individuals discuss their own sexual challenges more than expected, they may interpret the interaction as a negative violation of their expectations that results in having to engage in vulnerable communication with no clear benefits. The negative evaluation of such discussions, in turn, results in a decline in relational and sexual satisfaction.

Another contribution of this dissertation is toward our understanding of the mediating role of SCD in the established relationships between attachment and relational and sexual satisfaction. Results of this study revealed that the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD partially mediated the relationship between anxious attachment and sexual satisfaction, as well as the relationship between avoidance and sexual satisfaction. In other words, the sexual relationship maintenance and sexual experimentation sub-dimensions help explain the process through which attachment styles and sexual satisfaction are related. For example, the mediation analysis revealed that both the anxious and avoidant attachment negatively predicted the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD. That is, as avoidance and anxious attachments rose, expectations towards discussing preferred sexual positions, what one finds pleasurable, and sexual fantasies and fetishes were not being met in the actual communication taking place within the relationship. Furthermore, the analyses revealed that the same two sub-dimensions of SCD, in turn, predicted sexual satisfaction. In other words, the more one engaged in sexual communication beyond their expectations [within the realm of sexual relationship maintenance (i.e., discussing sexual preferences, what one finds pleasurable, how to reach orgasm) and sexual experimentation (i.e., discussing sexual fantasies, fetishes, and dirty talk) sub-dimensions of SCD], the higher one reported their sexual satisfaction to be.

As the first study to examine the mediating role of SCD, this dissertation's findings contribute to the understanding of how engaging in discussions about topics such as sexual intimacy and sexual pleasure (i.e., sexual relationship maintenance), as well as conversations about sexual fantasies and talking dirty (i.e., sexual experimentation) help explain the relationship between attachment and sexual satisfaction. Essentially, the results suggest that

one's attachment style (whether avoidant or anxious) negatively predicts their sexual satisfaction, in part, because these attachment styles decrease their engagement in sexual communication behaviors as compared to their expectations (i.e., SCD), which predicts lower sexual satisfaction due to the limited opportunity to educate their partner. This is particularly true for both the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD, as they focus on topics that educate sexual partners, such as what one finds pleasurable, preferred sexual positions, and sexual fantasies. That is, these topics help individuals be more satisfying sexual partners due to the opportunity to learn more about what their partner prefers and desires (Machette, 2022a; Machette et al., 2022). Thus, this dissertation extends the emerging research on SCD into modeling the relationship between individual characteristics (e.g., attachment styles), SCD, and relational and sexual health outcomes. As such, this study is the first to offer a holistic picture of both the antecedents and outcomes related to SCD, and how these concepts are related through a mediating variable, SCD.

Theoretical Implications

The current study relied on key assumptions of two social science theories, attachment theory (Bowlby, 1973, 1980) and EVT (Burgoon, 1978, 1985; Burgoon & Jones, 1976). As such, the findings of this dissertation have several theoretical implications. First, concerning attachment theory, this study revealed that both anxious and avoidant attachment predicted one's relational satisfaction. Such findings support notions outlined in attachment theory, which explains that anxious individuals view themselves as not worthy of love and, in turn, worry about their partners abandoning them (Lopez Portillo, 2020; Pietromonaco & Beck, 2015). As a result, such negative views of the self often influence an individual to limit their communication and disclosure behaviors (Feeney, 1999; Feeney et al., 2000; Guerrero, 2022), including

communication about sexual topics (Lopez Portillo, 2020), which, in turn, results in a less satisfying relationship. Moreover, attachment theory posits that avoidant individuals prefer to maintain emotional distance from their partners, which results in a less satisfying relationship (Guerrero et al., 2009; Jones & Cunningham, 1996), suggesting it may influence one's expectations for, and engagement in, sexual communication, resulting in SCD. These findings corroborate decades of past research on the relationship between attachment styles and relational satisfaction. For example, numerous studies grounded in attachment theory have revealed that attachment styles are negatively predictive of relational satisfaction (Alexandrov et al., 2005; Candel & Turliuc, 2019; Davis et al., 2006; Timm & Keiley, 2011). More specifically, this study offers theoretical insight into the role that attachment plays in predicting SCD. It may be that one's attachment influences how much individuals expect to, and engage in, sexual communication, which, in turn, leads to SCD. Thus, while past studies have routinely illustrated the predictive relationship between attachment and satisfaction, this dissertation highlights additional outcomes predicted by attachment (e.g., SCD), which, in turn, expands the theoretical scope and heuristic value of attachment theory within the realm of sexual communication.

Similarly, this study also revealed that both anxious and avoidant attachment predicted one's sexual satisfaction. Again, these findings support key ideas of attachment theory, which suggest that both anxious and avoidant individuals limit engagement in communication behaviors considered to be high risk (Coffelt & Hess, 2014; Lopez Portillo, 2020). In the realm of sexual communication behaviors, which are inherently risky to individuals, attachment theory suggests that both highly anxious and avoidant individuals would limit sexual communication and, in turn, reduce the opportunity to educate their partners about their sexual preferences, needs, and desires, leading to less satisfying sex (Hess & Coffelt, 2012; MacNeil & Byers,

2005). These findings, too, corroborate years of attachment theory research on the relationship between attachment styles and sexual satisfaction. For example, several studies have also revealed that attachment styles are negatively predictive of sexual satisfaction (Butzer & Campbell, 2008; Davis et al., 2006; Mark et al., 2018). Thus, this dissertation was able to replicate past work on attachment theory by revealing that anxious and avoidant attachment negatively predict relational and sexual satisfaction. Such findings offer theoretical implications by highlighting the use of attachment theory in understanding and predicting the antecedents of both relational and sexual satisfaction.

Furthermore, the findings of this study also revealed that avoidant attachment negatively predicted several sub-dimensions of SCD, including sexual relationship maintenance and sexual experimentation. As the first investigation to apply attachment theory to the study of SCD, these findings reflect the heuristic value of the theory and expand its applicability. For example, attachment theory states that a highly avoidant individual would likely avoid sexual communication behaviors to maintain emotional distance from their partner. The results of this dissertation support such a theoretical position, as it was found that the avoidant attachment style negatively predicted both the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD. Applying attachment theory may also highlight why these two factors were significantly predicted. As stated throughout this dissertation, attachment theory suggests that avoidant individuals will avoid engaging in communication behaviors that create feelings of closeness and intimacy. Both the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD focus on highly intimate and relationally close topics, such as intimacy related to sex, what one finds pleasurable, and sexual fantasies. Such topics require a level of trust that is associated with sharing personal information (Guerrero et al., 2009; Jones &

Cunningham, 1996). In contrast, the sexual issues and safe sex sub-dimensions of SCD may not evoke the same degree of closeness as they focus on topics such as what is not pleasurable during sex, using contraception, and the consequences of unprotected sex (Machette et al., 2022). In other words, discussing sexual issues or safe sex practices may not induce the same level of intimacy as the other two sub-dimensions of SCD; as such, avoidant individuals may not perceive these discussions to be as risky as conversations about sexual intimacy, sexual pleasure, and fantasies. Therefore, this study highlights the utility of attachment theory in predicting SCD.

Second, regarding EVT, this dissertation was the first empirical study to apply EVT to SCD. The results of this dissertation revealed that sub-dimensions of SCD predicted both relational and sexual satisfaction. The theoretical explanation for such findings rests on the assumptions of EVT. The theory states that individuals develop expectations for behaviors within a relationship, that, in turn, may be incongruent with their experience, which then results in either positive or negative outcomes (Bevan, 2003; Burgoon, 1978, 1985). In other words, the theory posits that, when one's expectations are either unmet or exceeded, such discrepancies can have positive or negative outcomes. Consequently, the concept of SCD was developed with these same principles in mind, with SCD focusing on the discrepancy that exists between one's expectations for sexual communication and the perceived actual amount of sexual communication taking place within one's relationship. Such discrepancies were predicted to lead to relational and sexual health outcomes (Machette, 2022a; Machette et al., 2022). Thus, this study extends the application of EVT into the realm of sexual communication by using the theory to explain the relationships between SCD and relational and sexual satisfaction.

In summary, the findings of this study contribute to theoretical knowledge about attachment theory and EVT, and their applicability to sexual communication behaviors. As such,

the findings of this dissertation offer the opportunity to extend the application of social science theory to understanding sexual communication behaviors within relationships.

Practical Implications

Findings from this study also have significant implications for clinical practitioners. The findings highlight the role of individual characteristics in predicting SCD. For example, the results revealed that avoidant attachment negatively predicted the sexual relational maintenance and sexual experimentation sub-dimensions of SCD. In other words, the higher one's avoidant attachment, the further their reported SCD moved towards a negative value for the sexual relational maintenance and sexual experimentation sub-dimensions of SCD. As a reminder, the sexual relational maintenance sub-dimension focuses on discussions that individuals engage in with their partner to maintain their sex life (Machette et al., 2022). In other words, this sub-dimension focuses on the conversations that help couples maintain a healthy, functioning collective sex life through partners educating one another (e.g., what feels pleasurable, how to reach orgasm). The results of this dissertation revealed that, as one's avoidant attachment increased, their expectations for conversations about how to improve the couple's sex life, sexual preferences, and more were increasingly likely to be unmet. This is particularly important in a clinical setting, where professionals try to assist sexual partners with discussing such topics with one another. Therefore, by recognizing if a partner is high in avoidant attachment can also reveal that they may be less inclined to engage in conversations about how to improve the couple's sex life, sexual preferences, and similar topics.

The sexual experimentation sub-dimension of SCD focuses on discussions involving the novel sexual behaviors that partners may choose to incorporate into their sex lives (Machette et al., 2022). As such, this sub-dimension primarily focuses on topics that are often considered

taboo (e.g., fantasies and fetishes). For example, recent studies have revealed that topics such as sexual fantasies and masturbation are often avoided within relationships (Lehmiller, 2018). Therefore, the results of this dissertation have revealed that as one's avoidant attachment increased, their expectations for discussing topics such as masturbation preferences, fantasies and fetishes, were increasingly likely to be unmet. Thus, in a practical sense, the findings may allow healthcare professionals to predict, and perhaps prevent, SCD in a clinical setting.

Taken together, these findings are important for clinical practitioners in several ways. First, these findings may assist professionals in predicting an individual's likelihood of developing negative SCD, and, in turn, help them develop practices for reducing their SCD. For example, much of the literature on sex therapy emphasizes the importance of sexual communication and sexual self-disclosure in helping couples overcome sexual challenges (Badr & Carmack Taylor, 2009; Witting et al., 2008). Examples of such challenges include sexual dissatisfaction (Jones et al., 2018), erectile dysfunction (Gambescia & Weeks, 2020; Li et al., 2016), and orgasm disorders (McCabe et al., 2020; Wincze & Weisberg, 2015). Specifically, it is often recommended that couples discuss sexual topics (such as what types of sexual behaviors each partner finds pleasurable and comfortable) to reestablish sexual connections and intimacy (Wincze & Weisberg, 2015), as well as share sexual fantasies and desires to increase sexual novelty within the relationship (Kahr, 2009; Lehmiller, 2018). These topics are very similar to the topics that are the focus of the sexual relational maintenance and sexual experimentation sub-dimensions of SCD. Thus, the results of this dissertation highlight that avoidance negatively predicts two aspects that are most related to common therapeutic practices. In other words, avoidant attachment may be playing a role in limiting treatment when couples are encouraged to discuss such sexual topics. For example, even if a person is encouraged in a clinical setting to

discuss such topics with their partner, a person's avoidant attachment style would limit their willingness to engage in sexual communication due to the perceived risks associated with such discussions (e.g., rejection, judgment). Thus, clinical practitioners may need to consider assessing individual traits, such as attachment, to understand how such characteristics may be contributing to the sexual communication challenges that couples seeking treatment experience.

Second, the results of this study are important in a clinical setting as they highlight the relational and sexual health consequences of SCD. For example, the study regression analyses revealed that all sub-dimensions of SCD predicted relational satisfaction. Furthermore, the sexual relationship maintenance, sexual experimentation, and sexual issues sub-dimensions of SCD predicted sexual satisfaction. In other words, the more one's expectations for discussing their sexual preferences, sexual novelty, and sexual challenges are exceeded, the more their relational and sexual satisfaction increase. Practitioners may find such findings useful for assisting individuals who exhibit low levels of relational or sexual satisfaction. For example, assessing individuals' SCD may prove fruitful in understanding the potential etiology of sexual challenges, such as a lack of satisfaction. Furthermore, clinical professionals may be able to use these findings to develop methods of teaching individuals how to talk about sexual topics with their partners as a method of improving both relational and sexual satisfaction.

Collectively, findings from this study offer practical implications within a clinical context. First, the findings underscore the role of avoidant attachment in predicting two sub-dimensions of SCD, as well as in predicting relational and sexual satisfaction. Second, the results further our understanding of the relational and sexual health outcomes associated with SCD, with both relational and sexual satisfaction being predicted by sub-dimensions of SCD. Professionals

may find that focusing on patients' SCD could offer a unique approach to treating sexual challenges.

Limitations

The results of this study offered valuable insight into the role of attachment, SCD, and relational outcomes. However, several limitations should be noted. First, the recruitment method offers limitations. Second, the participant population was largely White. Third, the study's participants were, on average, very satisfied in their relationships, limiting the study's ability to explore the relationship between SCD and relational satisfaction. Below is an explanation of these limitations.

As noted earlier in the dissertation, this study utilized the crowd-source platform, Prolific, for participant recruitment. As detailed in Chapter 3, the service offers several eligibility screeners to ensure the recruitment of appropriate participants. However, there are no screeners to ensure that two individuals who are in a romantic relationship are not both participating in the same study. Therefore, it may be possible that some participants in this study were romantic partners, meaning that both partners completed the study. Therefore, a limitation of this dissertation is that independence of observations in the form of individual unique responses cannot be fully guaranteed; some of the data may have come from dyads.

The study also lacked an ethnically/culturally diverse sample, which is noteworthy as culture's impact on sexuality is not inherently biological, but rather dictated by and woven throughout society (Bancroft, 2008; Gamson & Moon, 2004; Seidman, 2014). For example, societies' attitudes toward sexuality vary greatly, ranging from trepidation to an open approach (Buss & Schmitt, 2016; Jankowiak & Paladino, 2008). An example of society's impact on sexuality is sexual scripts, which are cognitive schema that represents how an individual

responds to specific sexual situations (Dworkin & O'Sullivan, 2005; Seal et al., 2008). The central idea of sexual script theory (Simon & Gagnon, 1984) is that sexuality is learned from one's culture, emphasizing the role of society rather than biology in one's sexuality. Recognized as their own subcultures with differences in terms of gender and relational norms (Hample & Cionea, 2012), ethnic groups display differences amongst their sexual scripts (Frith & Kitzinger, 2001; Holland & French, 2012). For instance, studies have revealed that Asian American individuals are typically less likely to use direct sexual communication strategies when compared to those who identify as African American, Hispanic, or White (Holland & French, 2012). Such studies emphasize the impact that one's subculture may play on their approach to sexual communication. Thus, individuals from subcultures that are likely to avoid direct sexual communication may feel that they cannot sexually communicate to the degree that they wish due to cultural sexual scripts. Thus, ethnicity and cultural background may play an important role in developing expectations towards sexual communication, and, in turn, predicting SCD. Therefore, ethnically and/or culturally diverse samples should be utilized in future studies examining SCD to understand better the unique role that ethnicity plays in sexual communication behaviors. This would allow researchers to explore how culture influences one's approach to sexual communication behaviors, and what effects that may have on their SCD. This would further help practitioners understand and be able to treat relational and sexual health outcomes associated with SCD in diverse populations.

Based on this limitation, a direction for future research would be to consider more diverse samples in respect to participants' sexual orientation and gender identity. By recruiting diverse samples, future studies could examine potential differences between heterosexual and LBGTQIA+ participants, as well as differences amongst members of the LBGTQIA+

community. This is particularly important as members of the LBGTQIA+ rely on distinctive sexual scripts compared to the heteronormative traditional script that is common in heterosexual couples (Gauvin & Pukall, 2018). Such differences may result in different expectations for sexual communication, and, in turn, engagement in sexual communication behaviors (Machette & Montgomery-Vestecka, 2023a). Future studies should strive for recruiting more diverse samples to represent members of diverse sexual orientation and gender identity groups better, as well as understand their unique experiences in terms of SCD better.

Another limitation of this dissertation study was that participants' relational satisfaction was rather high—participants reported an average relational satisfaction of 6.14 on a 7-point scale. Such high scores limit the opportunity to explore the relationship between attachment, SCD, and relational satisfaction in couples with lower satisfaction levels, where SCD may plan an even more important role, having potentially led to lower satisfaction levels. Therefore, future studies should explore these relationships with participants who exhibit various levels of relational satisfaction, perhaps from a clinical or therapeutic setting, as this would offer a more nuanced understanding of the impact of sexual communication behaviors on relational satisfaction.

Directions for Future Research

Considering this dissertation, and its limitations, there are three specific suggestions for directions for future research. The first is the need for a theory that better explains the interconnected relationship amongst antecedents and outcomes related to SCD. The second suggestion for future research focuses on including more antecedents and outcomes in future models of SCD. Finally, the third direction for future research emphasizes the value of utilizing

structural equation modeling (SEM) in future studies when attempting to model the relationships tied to SCD. Below is an overview of each of these directions for future research.

First, findings from this dissertation, along with a synthesis of the literature on sexual communication and sexual self-disclosure, highlight a void in theory that could explain the relationship between what influences one's expectations for sexual communication behaviors, how one elects to engage in such behaviors, and the outcomes associated with sexual communication behaviors. Studies have used communication privacy management theory to understand how individuals elect to withhold or disclose sexual information (Jaccard et al., 1998; Machette & Cionea, 2023; Xiao et al., 2015). Several studies have sought to understand what predicts engaging in sexual communication behaviors by using attachment theory (see Coffelt & Hess, 2014; Lopez Portillo, 2020; Machette & Drouin, 2023) and sexual script theory (see Machette & Montgomery-Vestecka, 2023a; Widerman, 2005). Although past work has highlighted several theories that explain phases of sexual communication, such as setting expectations for sexual communication, evaluating the risks of engaging in such communication, and the outcomes associated with sexual communication behaviors, no theory has yet explained these relationships wholistically. However, the antecedents of one's expectations, their engagement in sexual communication, and the outcomes associated with such behaviors are all undeniably interconnected. Therefore, a direction for future research could be to articulate a theory of sexual communication (TSC).

The proposed TSC could be interdisciplinary in nature, by incorporating concepts from several theories throughout the social sciences. For example, TSC could build from the umbrella of social exchange theory (Thibault & Kelley, 1959), as it considers disclosure to be a premeditated behavior, in which an individual determines the costs and rewards of engaging in

sexual communication and self-disclosure with another person. Second, TSC could borrow from social penetration theory (Altman & Taylor, 1973) by recognizing that self-disclosure generally promotes positive relational outcomes, such as intimacy, yet can simultaneously be affected by numerous factors including gender, culture, and more. TSC could also extend social science theories, such as dyadic power theory (Dunbar, 2004), by recognizing that relative power (whether perceived or actual) within a relationship is granted by sex roles and other societal norms, which can have a direct effect on relational partners' communicative behaviors (Dunbar, 2004; Dunbar et al., 2017). Taken together, TSC could recognize that sexual communication is a conscious decision that is made in anticipation of positive, relational, and individual rewards, within the realm of expected societal norms, while recognizing the potential for negative consequences.

Building on this dissertation and decades of sexual communication research, TSC could also recognize three critical phases of sexual communication: the pre-interaction phase, the interaction phase, and the post-interaction phase. The pre-interaction stage could focus on factors that influence expectations for sexual self-disclosure or sexual communication, in general. More specifically, the pre-interaction phase could highlight the impact of several factors that contribute to one's expectations towards sexual communication, including individual characteristics (e.g., attachment, sexual self-esteem), and societal (e.g., sexual scripts).

The second stage, the interaction phase, could focus on the evaluation, and possible enactment, of sexual communication behaviors. TSC could utilize past research to emphasize that the act of sexual communication is not a binary behavior, in which a person chooses either to sexually communicate or not, but, instead, that sexual communication exists on a spectrum communication that varies in amount from withholding all sexual communication to full

disclosure. As such, the theory could build on past work that has demonstrated that individuals use an internal cost/benefit analysis to determine what sexual topics should and should not be communicated to their partners, as well as how much disclosure would be appropriate for each topic (Brown & Weigel, 2018; Machette & Cionea, 2023). The proposed TSC could also build on past work to propose that individual, relational, and environmental factors influence such evaluations. For example, as outlined throughout this dissertation, individual characteristics, such as one's attachment or another characteristic, sexual self-esteem, have been found to influence one's engagement in sexual communication behaviors (Ménard & Offman, 2009; Peixoto et al., 2018; Wu & Zheng, 2021). Similarly, past work has highlighted the role of relational factors, such as perceived threat of sexual communication, in one's engagement in sexual communication behaviors. Finally, scholars have demonstrated that one's environment, both cultural and physical, influences one's sexual communication behaviors. For example, sexual scripts that determine what topics are appropriate to discuss with one's sexual partner are culturally bound (Dworkin & O'Sullivan, 2005; Seal et al., 2008). As such, one may evaluate that they should engage in, or refrain from, sexual communication behaviors due to cultural norms. Similarly, scholars have noted that one's physical environment also influences self-disclosure behaviors, with studies highlighting that individuals are more likely to self-disclose in more depth when online compared to face-to-face (Jiang & Hancock, 2013; Suler, 2004). Collectively, the second stage of the proposed TSC could incorporate past theoretical and empirical work to outline the factors that influence one's decision of whether to engage in sexual communication or not.

The third phase of TSC could emphasize that the outcomes associated with sexual communication behaviors could be positive or negative. In this final stage, TSC could build on

existing work that has begun to identify outcomes associated with sexual communication behaviors, relational and sexual satisfaction (Machette, 2022a; Machette & Montgomery-Vestecka, 2023a), sexual function (Machette & Montgomery-Vestecka, 2023b), and more (Machette & Cionea, 2023; Machette et al., 2022). Furthermore, the theory could examine outcomes across cultures, recognizing that not all advantages or disadvantages of engaging in sexual communication exist or manifest in similar ways across cultures. Thus, the third stage of TSC could incorporate past work on understanding the outcomes related to sexual communication behaviors and how they are related to the first two stages of sexual communication.

In sum, a theoretical model of TSC could consist of three distinct phases or stages, such as the pre-interaction, the interaction, and the post-interaction phase. The pre-interaction phase could include individual traits, such as one's attachment, sexual self-esteem, and willingness and comfort in engaging in sexual communication, as well as cultural considerations, such as cultural scripts, religiosity, or societal norms. These features, in turn, would influence the interaction phase, which focuses on the internal cost/benefit analysis that takes place when an individual is evaluating both if and how much to engage in sexual communication. Concepts such as SCD or sexual self-disclosure could be included in this second, interaction phase. Lastly, the interaction phase would influence the post-interaction phase, which would consist of outcomes associated with sexual communication behaviors, including relational and sexual satisfaction, conflict, intimacy, trust, and sexual function. Altogether, the TSC would offer a theorical framework for scholars and clinicians to understand the relationships between concepts that influence one's expectation for sexual communication, their engagement in such communication, and the effects that sexual communication has on sexual relationships.

The proposed TSC could incorporate theoretical work from the social science fields, such as psychology (e.g., attachment theory, social exchange theory) and communication (e.g., EVT, communication privacy management theory) along with findings from applied, empirical domains, such as marital and sex therapy, to articulate an interdisciplinary theory that outlines the process of sexual communication behaviors. The theory could contribute to future studies of sexual communication behaviors in both academic and clinical settings.

The second direction for future research that I propose based on this dissertation is incorporating additional individual characteristics and relational variables into the antecedents of future models of SCD. For example, beyond attachment, other potential individual characteristics may also influence such behaviors and outcomes. For instance, sexual self-esteem (one's affective reactions to appraisals of their sexual thoughts, feelings, and behavior; Zeanah and Schwarz, 1996) has been found to be positively associated with sexual satisfaction. Individuals whose self-esteem was higher also demonstrated higher levels of sexual assertiveness, which led to greater sexual satisfaction (Oattes & Offman, 2007). Sexual self-esteem has also been linked to safer sex behaviors, with individuals who have higher sexual self-esteem being more likely to practice sex safe behaviors, such as wearing a condom, than those with lower sexual self-esteem (Adler & Hendrick, 1991; Rosenthal et al., 1991; Seal et al., 1997). Studies have also revealed that sexual self-esteem was associated with sexual satisfaction and sexual function (Ménard & Offman, 2009; Peixoto et al., 2018; Wu & Zheng, 2021). Such findings suggest that, as one’s sexual self-esteem increases, their sexual function, and, in turn, satisfaction, also increase. This relationship could be explained by the understanding that sexual self-esteem gives an individual confidence in their sexual abilities, which leads to better functioning during sexual activities (e.g., less anxiety, more mindfulness), and, ultimately, more satisfying sex. Thus, sexual self-

esteem could be a valuable predictor of individuals' SCD. Given that sexual self-esteem predicts both expectations for sexual communication and engagement in sexual communication, which are key to SCD, it is likely that sexual self-esteem would also predict SCD.

Furthermore, relational characteristics may also contribute to sexual communication behaviors, including SCD, and should be considered in future studies. For example, the threat of sexual communication and relational uncertainty have been highlighted in the literature in relation to sexual communication behaviors (Brown & Weigel, 2018; Machette, 2022a; Theiss & Estlein, 2014; Theiss & Solomon, 2007). The perceived threat of sexual communication captures the perception of individual (e.g., partner's judgment) or relational (e.g., relational conflict or dissolution) threats that occur as an outcome of discussing sexual topics with a partner (Theiss & Estlein, 2014). Past research has reported that the perceived threat of sexual communication negatively predicted sexual satisfaction (Theiss & Estlein, 2014). In other words, when an individual perceives sexual communication to be threatening, their sexual satisfaction decreases. This decline in satisfaction is likely due to the individual not feeling comfortable expressing what they find pleasurable, arousing, and so on regarding sexual activities, which could create SCD.

Perceived threat of sexual communication has also been found to predict sexual topic avoidance (i.e., strategically withholding information from a partner on sexual topics; Afifi & Guerrero, 2000), as well as indirect sexual communication (i.e., lack of openness and directness in one's messages about sex; Knobloch & Carpenter-Theune, 2004). Topic avoidance has been associated with decreased intimacy, which has further been found to be strongly and negatively correlated with relational satisfaction (Afifi & Guerrero, 2000; Machette, 2022a), as well as negatively associated with sexual satisfaction (Theiss & Estlein, 2014). Similarly, indirect

communication has been found to be negatively associated with sexual satisfaction (Theiss & Estlein, 2014). Taken together, these results suggest that a perceived threat of sexual communication may obscure individuals' connection with their partner and reduce their sexual satisfaction (Theiss & Estlein, 2014; Theiss & Solomon, 2007). Thus, it is possible that one may expect to communicate about sexual topics with their partner but withhold discussions in response to a perceived threat (Theiss & Estlein, 2014). This difference between expectations and actual sexual communication would likely result in SCD (Machette, 2022a; Machette et al., 2022). As such, the perceived threat of sexual communication should be recognized as one of the key relational characteristics that may be included in any future studies on relational predictors of SCD. The inclusion of the concept would offer both researchers and clinical professionals further insight into how the perceived threat of sexual communication may predict, and, in turn, how to prevent, SCD in individuals' relationships.

Another variable that could be included in future research is relational uncertainty, which captures how confident an individual is in their own and their partner's involvement in their relationship (Knobloch & Solomon, 2002). Several studies have specifically focused on relational uncertainty's influence on sexual communication. For example, Brown and Weigel (2018) found that relational uncertainty negatively predicted sexual communication. That is, when individuals experienced uncertainty within their relationship, they were less likely to engage in sexual communication with their partners because they perceived more relational risks (e.g., conflict, relational dissolution) to be associated with sexual communication when uncertainty was high. Furthermore, relational uncertainty positively predicted the perceived threat of sexual communication, which, as detailed above, reduces sexual communication, and has consequences on sexual health outcomes, such as sexual satisfaction and intimacy (Theiss &

Estlein, 2014; Theiss & Solomon, 2007). Thus, these studies illustrate the predictive relationship between relational uncertainty and sexual communication.

Recent studies have also detailed the connections between relational uncertainty and SCD. For example, Machette (2022a) noted that relational uncertainty was negatively associated with SCD, suggesting that, as one's relational uncertainty rises, their negative discrepancy in sexual communication grows larger. This example illustrates why an individual may expect to participate in sexual communication but decides to withhold such communication after evaluating their relational uncertainty (Machette, 2022a). Thus, relational uncertainty should also be considered for future studies examining relational predictors of SCD. The inclusion of the concept would offer both researchers and clinical professionals further insight into how relational uncertainty may predict, and in turn, how to prevent, SCD in individuals' relationships and, as a result, influence relational and sexual health outcomes.

Beyond predictors, future studies should consider expanding the outcomes included in future models of SCD. In addition to the outcomes measured in the current dissertation (i.e., relational and sexual satisfaction), other relational and sexual health concepts may also be related to SCD. The primary relational outcome that may be considered for future studies is relational closeness. Similar to relational satisfaction, closeness is related to one's overall wellbeing (Diener & Biswas-Diener, 2008; Helliwell & Putnam, 2004). For example, closeness is associated with lower perceived stress, increased positive emotions, and improved physiological reactivity to stress (Carlisle et al., 2012; Cwir et al., 2011; Ramsey & Gentzler, 2015). Additionally, closeness has been found to benefit relationships by increasing a couple's problem resolution, increasing helping behaviors, and increased empathy toward one's partner (Campbell et al., 2008; Myers et al., 2014; Neuberg et al., 1997). Past studies have also revealed

associations between sexual communication and relational closeness (Coffelt & Hess, 2014; Hess & Coffelt, 2012; Kuang & Gettings, 2021). Regardless of what type of sexual communication couples participate in, individuals perceive the relationship to be closer than couples who do not discuss sexual topics as often. Thus, there are clear associations between sexual communication and closeness, suggesting that the concept may be valuable to include in future studies examining relational outcomes associated with SCD. As such, the inclusion of relational closeness in future work on modelling SCD could offer researchers and clinical professionals a better understanding into how SCD may predict relational closeness in couples, which, in turn, could lead to clinical inventions for reducing negative SCD to improve relational closeness.

There are also several sexual health outcomes that could be valuable to examine in future studies. The first such concept is sexual intimacy, which is defined as a shared experience of sexual excitement, contentment, or pleasure within a partnership (Garrett, 2014). Past studies have revealed the important role of intimacy on individuals' overall health, including increased cardiovascular health (Fuligni et al., 2009; Gump et al., 2001; Holt-Lunstad et al., 2008), decreased mortality rate (Holt-Lunstad et al., 2010), and improved neuroendocrine processes (Doane & Adam, 2010). Past studies have also shown the importance of intimacy to one's sexual life. Intimacy is positively associated with sexual satisfaction (Haning et al., 2007; Machette, 2022a; Montesi et al., 2013), suggesting that, as one's perceived intimacy within their relationship increases, their evaluation of their sexual partnership also rises. Furthermore, intimacy is associated with sexual function (McCabe, 1997; Stuart et al., 1987) and frequency of sexual activity (Donnelly et al., 2001), which both play key roles in predicting and maintaining sexual satisfaction (Peixoto et al., 2018; Schoenfeld et al., 2017). MacNeil and Byers (2005)

further argued that sexual intimacy is key to sexual communication, as the closeness associated with intimacy prompts individuals to feel comfortable discussing sexual topics, which involves vulnerability. In turn, this sexual communication may lead to increased sexual intimacy, creating an expressive pathway between partners, and, ultimately, increasing sexual satisfaction. Other studies have confirmed this relationship between sexual communication and sexual intimacy, finding that the two concepts are significantly and positively correlated (Machette, 2022a). Thus, existing literature highlights the role of sexual communication in developing sexual intimacy within a relationship, suggesting that it may be worthwhile to incorporate this concept into future studies examining the sexual health outcomes related to SCD. This could offer researchers and clinical professionals a better understanding of how SCD may predict sexual intimacy, which, in turn, could lead to clinical inventions for treating intimacy issues by addressing negative SCD in relationships.

Another concept that may be important to incorporate in future studies is condom negotiation, which is defined as the process through which sexual partners decide, through discussion, to use a condom during sexual activities such as anal, oral, and vaginal sex (Peasant et al., 2015). This process plays a critical role in predicting safe sex behaviors, as condom negotiation is positively associated with condom use, which can prevent unplanned pregnancy and the transmission of STI (Catania et al., 1994; Noar et al., 2006; Sheeran et al., 1999; Widman et al., 2014). Unsurprisingly, sexual communication and condom negotiation are closely related. Discussing specific sexual topics (i.e., condom use) overlaps with the definition of condom negotiation. However, other topics of sexual communication, such as one's sexual history, are significantly associated with condom use, too (Noar et al., 2004). Furthermore, general sexual communication is also predictive of contraceptive use (Widman et al., 2006).

Taken together, these findings suggest that sexual communication can lead to condom and contraceptive use and that condom negotiation may be a concept to incorporate into future research on the sexual health outcomes predicted by SCD. This approach could offer researchers and public health officials a unique approach to increasing condom negotiation by focusing on improving one's SCD.

Another important concept that should be considered in future research on outcomes predicted by SCD is sexual function. Sexual function is critical to one's sexual, psychological, and physical wellbeing. For example, sexual function is a significant predictor of sexual satisfaction in both females and males (Bravi et al., 2020; Haning et al., 2007; Peixoto et al., 2018), which is predictive of overall wellbeing (Davison et al., 2009). Sexual dysfunction is highly prevalent, affecting an estimated 38% to 63% of adult women (Jaafarpour et al., 2013, Laumann et al., 1999), and approximately 31% of adult males (Rosen, 2000). As such, sexual dysfunction is common within the general population, and deserves further scholarly attention to be understood better in order to improve individuals' sexual function. Although the etiology of sexual dysfunctions varies, many sexual issues can be improved with sexual communication (Wincze & Weisberg, 2015). For instance, erectile dysfunction, which is the inability to attain or maintain an erection that is sufficient for successful sexual vaginal intercourse (Shamloul & Ghanem, 2013), may be treated, at least in part, with sexual communication. Educating one's partner about sexual preferences (i.e., turn-ons) may lead to men achieving erections (Gambescia & Weeks, 2020). Similarly, sexual communication is used to treat female orgasmic disorder, which occurs when a woman's ability to orgasm is "less than would be reasonable for her age, sexual experience, and the adequacy of sexual stimulation she receives" (Meston et al., 2004, p. 67). Discussion about what one finds sexually arousing may help partners achieve orgasm

(Everaerd & Dekkker, 1982; McCabe et al., 2020). Thus, sexual communication plays a vital role in treating certain forms of sexual dysfunction. As such, the inclusion of sexual (dys)function in future models of SCD could offer valuable insight for clinical professionals in regard to how SCD may predict sexual dysfunction, and, as a result, offer a unique approach to treatment via improving one's SCD.

Finally, another direction for future research pertains to the modeling of the relationships between attachment (or antecedents, in general), SCD, and outcomes. In the current dissertation study, albeit initially intended as such, a structural equation model connecting attachment styles, SCD (and sexual self-disclosure) and relational and sexual satisfaction was not feasible. Using mediation analysis via PROCESS permitted the documentation of the mediating role of SCD in the already established relationships between attachment and satisfaction. Given that this was the first study to propose such a mediation model, PROCESS provided an adequate test for the proposed hypotheses. However, modeling these relationships via SEM may offer additional benefits. Mediation models are simpler than SEM models and are used when the researcher is interested in the indirect effect of an independent variable on a dependent variable, through a mediator (Gunzler et al., 2013; Hayes, 2018). An SEM would provide a more complex overall framework that could capture additional relationships between all variables, including direct and indirect effects (Gunzler et al., 2013; Sardeshmukh & Vandenberg, 2017). Therefore, if future studies could utilize SEM analysis, they may be able to articulate a full model that can connect antecedent variables, SCD as mediators, and outcome variables to explain the process of what influences the development of SCD and what consequences such SCD have on relationships.

Conclusion

The dissertation contended that individual characteristics, such as one's attachment style, predict sexual communication behaviors, such as SCD and sexual self-disclosure. These sexual communication behaviors, in turn, were hypothesized to predict relational and sexual health outcomes, such as satisfaction. As such, this study also hypothesized that SCD would mediate the relationship between attachment styles and satisfaction, direct relationships that have been well documented in past research. Additionally, the study examined the potential mediation role of sexual self-disclosure within the same relationships and explored how sexual self-disclosure compared to SCD as mediators.

Results revealed that the avoidant attachment style negatively predicted the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD. Moreover, results confirmed past studies that have found both avoidant and anxious attachment predicted relational and sexual satisfaction. Thus, the scope of attachment theory was furthered by revealing that one's avoidance toward emotional closeness also influenced their sexual communication behaviors. Additionally, the analyses revealed that sexual relationship maintenance, sexual experimentation, and safe sex positively predicted relational satisfaction, whereas sexual issues negatively predicted relational satisfaction. Results also revealed that sexual relationship maintenance and sexual experimentation positively predicted sexual satisfaction, whereas safe sex negatively predicted sexual satisfaction. Furthermore, results revealed that the relationship between anxious attachment and relational satisfaction was partially mediated by the sexual relationship maintenance and sexual experimentation sub-dimensions of SCD. Similarly, the same two sub-dimensions of SCD partially mediated the relationship between anxious attachment and sexual satisfaction. Additionally, sexual relationship maintenance, sexual experimentation, and sexual self-disclosure partially mediated the relationship between avoidant

attachment and sexual satisfaction. Therefore, recent work on relational and sexual health outcomes predicted by SCD was extended, as the more positive one's SCD became, the higher they perceived their relational and sexual satisfaction to be, in general. Lastly, the results revealed that anxious and avoidant attachment's relationship with sexual satisfaction was partially mediated by sexual self-disclosure, confirming past research on the role of such disclosure in sexual relationships.

The present study's findings provide empirical evidence regarding the antecedents that predict SCD (i.e., avoidant attachment), as well as the outcomes associated with such discrepancies (i.e., relational and sexual satisfaction). Furthermore, the findings highlight the mediating role of SCD in the previous established relationships between attachment and satisfaction. With sexual communication behaviors being central to sexual relationships, the present study takes an initial step toward modeling the relationships between antecedents, sexual communication behaviors, and predicted outcomes, suggesting fruitful future research could be conducted for modeling further such associations and, perhaps, advancing a theory of sexual communication.

References

Afifi, T., & Steuber, K. (2009). The revelation risk model (RRM): Factors that predict the revelation of secrets and the strategies used to reveal them. *Communication Monographs*, *76*(2), 144-176. https://doi.org/10.1080/03637750902828412

Afifi, W. A., & Metts, S. (1998). Characteristics and consequences of expectation violations in close relationships. *Journal of Social and Personal Relationships*, *15*(3), 365-392. https://doi.org/10.1177/0265407598153004

Ainsworth, M. D. S. (1969). Object relations, dependency, and attachment: A theoretical review of the infant-mother relationship. *Child Development*, *40*(1), 969-1025. https://doi.org/10.2307/1127008

Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist*, *46*(4), 333-341. https://doi.org/10.1037/0003-066X.46.4.333

Alaggia, R. (2005). Disclosing the trauma of child sexual abuse: A gender analysis. *Journal of Loss and Trauma*, *10*(5), 453-470. https://doi.org/10.1080/15325020500193895

Alexandrov, E. O., Cowan, P. A., & Cowan, C. P. (2005). Couple attachment and the quality of marital relationships: Method and concept in the validation of the new couple attachment interview and coding system. *Attachment & Human Development*, *7*(2), 123-152. https://doi.org/10.1080/14616730500155170

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders*. American Psychiatric Publishing.

Anderson, M., Kunkel, A., & Dennis, M. R. (2011). “Let’s (not) talk about that”: Bridging the past sexual experiences taboo to build healthy romantic relationships. *Journal of Sex Research*, *48*(4), 381-391. https://doi.org/10.1080/00224499.2010.482215

Atallah, S., Johnson-Agbakwu, C., Rosenbaum, T., Abdo, C., Byers, E. S., Graham, C., ... & Brotto, L. (2016). Ethical and sociocultural aspects of sexual function and dysfunction in both sexes. *The Journal of Sexual Medicine, 13*(4), 591-606. https://doi.org/10.1016/j.jsxm.2016.01.021

Badr, H., & Carmack Taylor, C. L. (2009). Sexual dysfunction and spousal communication in couples coping with prostate cancer. *Psycho-Oncology*: *Journal of the Psychological, Social and Behavioral Dimensions of Cancer*, *18*(7), 735-746. https://doi.org/10.1002/pon.1449

Bancroft, J. H. J. (2008). *Human sexuality and its problems*. Elsevier Health Sciences.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, *7*(2), 147-178. https://doi.org/10.1177/0265407590072001

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*(1), 226-244. https://doi.org/10.1037/0022-3514.61.2.226

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*(2), 238-246. https://doi.org/10.1037/0033-2909.107.2.238

Bevan, J. L. (2003). Expectancy violation theory and sexual resistance in close, cross-sex relationships. *Communication Monographs*, *70*(1), 68-82. https://doi.org/10.1080/03637750302476

Birnie-Porter, C., & Lydon, J. E. (2013). A prototype approach to understanding sexual intimacy through its relationship to intimacy. *Personal Relationships*, *20*(2), 236-258. https://doi.org/10.1111/j.1475-6811.2012.01402.x

Blunt-Vinti, H., Jozkowski, K. N., & Hunt, M. (2019). Show or tell? Does verbal and/or nonverbal sexual communication matter for sexual satisfaction?. *Journal of Sex & Marital Therapy*, *45*(3), 206-217. https://doi.org/10.1080/0092623X.2018.1501446

Bogart, L. M., Cecil, H., Wagstaff, D. A., Pinkerton, S. D., & Abramson, P. R. (2000). Is it "sex"?: College students' interpretations of sexual behavior terminology. *Journal of Sex Research*, *37*(2), 108-116. https://doi.org/10.1080/00224490009552027

Bowlby, J. (1973). *Attachment and loss*: *Separation, anxiety and anger*. Basic Books.

Bowlby, J. (1980). *Attachment and loss: Loss, sadness and depression*. Basic Books.

Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, *52*(4), 664-678. https://doi.org/10.1111/j.1939-0025.1982.tb01456.x

Bravi, C. A., Tin, A., Montorsi, F., Mulhall, J. P., Eastham, J. A., & Vickers, A. J. (2020). Erectile function and sexual satisfaction: The importance of asking about sexual desire. *The Journal of Sexual Medicine*, *17*(2), 349-352. https://doi.org/10.1016/j.jsxm.2019.09.024

Brezsnyak, M., & Whisman, M. A. (2004). Sexual desire and relationship functioning: The effects of marital satisfaction and power. *Journal of Sex & Marital Therapy*, *30*(3), 199-217. https://doi.org/10.1080/00926230490262393

Brody, S. (2004). Slimness is associated with greater intercourse and lesser masturbation frequency. *Journal of Sex & Marital Therapy*, *30*(4), 251-261. https://doi.org/10.1080/00926230490422368

Brody, S. (2006). Blood pressure reactivity to stress is better for people who recently had penile-vaginal intercourse than for people who had other or no sexual activity. *Biological Psychology*, *71*(2), 214-222. https://doi.org/10.1016/j.biopsycho.2005.03.005

Brody, S., & Costa, R. M. (2009). Anatomy/physiology: Satisfaction (sexual, life, relationship, and mental health) is associated directly with penile-vaginal intercourse, but inversely with other sexual behavior frequencies. *The Journal of Sexual Medicine, 6*(7), 1947-1954. https://doi.org/10.1111/j.1743-6109.2009.01303.x

Brody, S., Veit, R., & Rau, H. (2000). A preliminary report relating frequency of vaginal intercourse to heart rate variability, Valsalva ratio, blood pressure, and cohabitation status. *Biological Psychology, 52*(3), 251-257. https://doi.org/10.1016/S0301-0511(99)00048-4

Brown, R. D. (2018*). Sexual self-concept and sexual self-disclosure: Examining the role of individual factors within a contextual model of sexual self-disclosure* [Unpublished doctoral dissertation]. University of Nevada, Reno.

Brown, R. D., & Weigel, D. J. (2018). Exploring a Contextual Model of Sexual Self-Disclosure and Sexual Satisfaction. *Journal of Sex Research, 55*(2), 202-213. https://doi.org/10.1080/00224499.2017.1295299

Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). Guilford.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Sage.

Burgoon, J. K. (1978). A communication model of personal space violations: Explication and an initial test. *Human Communication Research, 4*(2), 129-142. https://doi.org/10.1111/j.1468-2958.1978.tb00603.x

Burgoon, J. K. (1995). Cross-cultural and intercultural applications of expectancy violations theory. In R. L. Wiseman (Ed.), *Intercultural communication theory* (pp. 194-214). Sage.

Burgoon, J. K., & Jones, S. B. (1976). Toward a theory of personal space expectations and their violations. *Human Communication Research, 2*(2), 131-146. https://doi.org/10.1111/j.1468-2958.1976.tb00706.x

Burri, A., & Spector, T. (2011). Recent and lifelong sexual dysfunction in a female UK population sample: Prevalence and risk factors. *The Journal of Sexual Medicine, 8*(9), 2420-2430. https://doi.org/10.1111/j.1743-6109.2011.02341.x

Buss, D. M., & Schmitt, D. P. (2016). Sexual strategies theory. In T. Shackelford & V. Weekes-Shackelford (Eds.), *Encyclopedia of evolutionary psychological science* (pp. 7509-7513). Springer. https://doi.org/10.1007/978-3-319-16999-6_1861-1

Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. *Personal Relationships, 15*(1), 141-154. https://doi.org/10.1111/j.1475-6811.2007.00189.x

Byers, E. S. (2005). Relationship satisfaction and sexual satisfaction: A longitudinal study of individuals in long-term relationships. *Journal of Sex Research, 42*(2), 113-118. https://doi.org/10.1080/00224490509552264

Byers, E. S. (2011). Beyond the birds and the bees and was it good for you? Thirty years of research on sexual communication. *Canadian Psychology/ Psychologie Canadienne, 52*(1), 20-28. https://doi.org/10.1037/a0022048

Byers, E. S., & Demmons, S. (1999). Sexual satisfaction and sexual self-disclosure within dating relationships. *Journal of Sex Research, 36*(2), 180-189. https://doi.org/10.1080/00224499909551983

Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). Routledge.

Candel, O. S., & Turliuc, M. N. (2019). Insecure attachment and relationship satisfaction: A meta-analysis of actor and partner associations. *Personality and Individual Differences*, *147*(1), 190-199. https://doi.org/10.1016/j.paid.2019.04.037

Carvallo, M., & Gabriel, S. (2006). No man is an island: The need to belong and dismissing avoidant attachment style. *Personality and Social Psychology Bulletin*, *32*(5), 697-709. https://doi.org/10.1177/0146167205285451

Cassidy, J., & Berlin, L. J. (1994). The insecure/ambivalent pattern of attachment: Theory and research. *Child Development*, *65*(4), 971-991. https://doi.org/10.2307/1131298

Catania, J. A., Coates, T. J., & Kegeles, S. (1994). A test of the AIDS risk reduction model: Psychosocial correlates of condom use in the AMEN cohort survey. *Health Psychology*, *13*(6), 548-555. https://doi.org/10.1037/0278-6133.13.6.548

Chang, Y.-C. (2015) *The study on sexual attitude, sexual communication and sexual satisfaction of new female residents: A case of Meinong District of Kaohsiung* [Unpublished doctoral dissertation]. Shu-Te University.

Chiu, Y.-C. (2019) *Comparative study on women's prenatal and postnatal sexual communication and sexual satisfaction* [Unpublished doctoral dissertation]. Shu-Te University.

Coffelt, T. A. (2021). *Interpersonal sexual communication across the lifespan*. Peter Lang.

Coffelt, T. A., & Hess, J. A. (2014). Sexual disclosures: Connections to relational satisfaction and closeness. *Journal of Sex and Marital Therapy*, *40*(6), 577-591. https://doi.org/10.1080/0092623X.2013.811449

Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*(1), 155-159. https://doi.org/10.1037/0033-2909.112.1.155

Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology*, *71*(4), 810-832. https://doi.org/10.1037/0022-3514.71.4.810

Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology*, *78*(6), 1053-1073. https://doi.org/10.1037/0022-3514.78.6.1053

Conley, T. D., & Klein, V. (2022). Women get worse sex: A confound in the explanation of gender differences in sexuality. *Perspectives on Psychological Science*, *17*(4), 960-978. https://doi.org/10.1177/17456916211041598

Davis, D., Shaver, P. R., Widaman, K. F., Vernon, M. L., Follette, W. C., & Beitz, K. (2006). "I can't get no satisfaction": Insecure attachment, inhibited sexual communication, and sexual dissatisfaction. *Personal Relationships, 13*(4), 465-483. https://doi.org/10.1111/j.1475-6811.2006.00130.x

Delaney, A. L. (2021). A relational turbulence model of sexual communication in couples with depression. *Communication Research, 48*(8), 1157-1181. https://doi.org/10.1177/0093650220958222

Denes, A. (2012). Pillow talk: Exploring disclosures after sexual activity. *Western Journal of Communication, 76*(2), 91-108. https://doi.org/10.1080/10570314.2011.651253

Denes, A. (2018). Toward a post-sex disclosures model: Exploring the associations among orgasm, self-disclosure, and relationship satisfaction. *Communication Research, 45*(3), 297-318. https://doi.org/10.1177/0093650215619216

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

Diamond, L. M. (2010a, November). *Toward greater integration of sex research with relationship research: Do we have the right teams, methods, and questions*. [Conference presentation]. Annual meeting of the Society for the Scientific Study of Sexuality, Las Vegas, NV.

Diamond, L. M. (2010b, July). *Where's the sex in relationship research? Where are the relationships in sex research?* [Conference presentation]. Annual meeting of the International Association for Relationship Research, Herzliya, Israel.

Dillow, M. R., Goodboy, A. K., & Bolkan, S. (2014). Attachment and the expression of affection in romantic relationships: The mediating role of romantic love. *Communication Reports, 27*(2), 102-115. https://doi.org/10.1080/08934215.2014.900096

DiMauro, J., & Renshaw, K. D. (2018). Trauma-related disclosure in sexual assault survivors' intimate relationships: Associations with PTSD, shame, and partners' responses. *Journal of Interpersonal Violence*, *36*(3-4), NP1986–2004NP. https://doi.org/10.1177/0886260518756117

Doane, L. D., & Adam, E. K. (2010). Loneliness and cortisol: Momentary, day-to-day, and trait associations. *Psychoneuroendocrinology*, *35*(3), 430-441. https://doi.org/10.1016/j.psyneuen.2009.08.005

Donnelly, D., Burgess, E., Anderson, S., Davis, R., & Dillard, J. (2001). Involuntary celibacy: A life course analysis. *Journal of Sex Research, 38*(2), 159-169. https://doi.org/10.1080/00224490109552083

Drabick, J. J., Gambel, J. M., & Mackey, J. F. (1997). Prostatodynia in United Nations peacekeeping forces in Haiti. *Military Medicine, 162*(6), 380-383. https://doi.org/10.1093/milmed/162.6.380

Dworkin, S. L., & O'Sullivan, L. (2005). Actual versus desired initiation patterns among a sample of college men: Tapping disjunctures within traditional male sexual scripts. *Journal of Sex Research, 42*(2), 150-158. https://doi.org/10.1080/00224490509552268

Eagle, M. (2011). Attachment and sexuality. In D. Diamond, S. J. Blatt, & J. D. Lichtenberg (Eds.), *Attachment and sexuality* (pp. 27-50). Routledge.

Everaerd, W., & Dekker, J. (1982). Treatment of secondary orgasmic dysfunction: A comparison of systematic desensitization and sex therapy. *Behaviour Research and Therapy, 20*(3), 269-274. https://doi.org/10.1016/0005-7967(82)90145-0

Faulkner, S. L., & Lannutti, P. J. (2010). Examining the content and outcomes of young adults' satisfying and unsatisfying conversations about sex. *Qualitative Health Research, 20*(3), 375-385. https://doi.org/10.1177/1049732309354274

Feeney, J. A. (1999). Adult attachment, emotional control, and marital satisfaction. *Personal Relationships*, *6*(2), 169-185. https://doi.org/10.1111/j.1475-6811.1999.tb00185.x

Feeney, J. A. (2016). Adult romantic attachment: Developments in the study of couple relationships. In J. Cassidy & P. R. Shaver (Eds.), *The handbook of attachment: Theory, research, and clinical applications* (pp. 435-463). Guilford Press.

Feeney, J. A., & Noller, P. (1996). *Sage Series on close relationships: Adult attachment*. Sage. https://doi.org/10.4135/9781452243276

Feeney, J. A., Noller, P., & Roberts, N. (2000). Attachment and close relationships. In C. Hendrick & S. S. Hendrick (Eds.), *Close relationships: A sourcebook* (pp. 185-201). Sage.

Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). Sage.

Flores, D., & Barroso, J. (2017). 21st century parent-child sex communication in the United States: A process review. *The Journal of Sex Research, 54*(4-5), 532-548. https://doi.org/10.1080/00224499.2016.1267693

Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology, 4*(2), 132-154. https://doi.org/10.1037/1089-2680.4.2.132

Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*(2), 350-365. https://doi.org/10.1037/0022-3514.78.2.350

Frith, H., & Kitzinger, C. (2001). Reformulating sexual script theory: Developing a discursive psychology of sexual negotiation. *Theory and Psychology, 11*(2), 209-232. https://doi.org/10.1177/0959354301112004.

Fuligni, A. J., Telzer, E. H., Bower, J., Cole, S. W., Kiang, L., & Irwin, M. R. (2009). A preliminary study of daily interpersonal stress and C-reactive protein levels among adolescents from Latin American and European backgrounds. *Psychosomatic Medicine, 71*(3), 329-333. https://doi.org/10.1097/PSY.0b013e3181921b1f

Gallup Jr., G. G., Burch, R. L., & Platek, S. M. (2002). Does semen have antidepressant properties?. *Archives of Sexual Behavior, 31*(3), 289-293. https://doi.org/10.1023/A:1015257004839

Gambescia, N., & Weeks, G. R. (2020). Systematic treatment of erectile disorder. In K. M. Hertlein, N. Gambescia, & G. R. Weeks (Eds.), *Systematic sex therapy* (pp. 60-76). Routledge.

Gamson, J., & Moon, D. (2004). The sociology of sexualities: Queer and beyond. *Annual Review of Sociology*, *30*(1), 47-64. https://doi.org/10.1146/annurev.soc.30.012703.110522

Garrett, D. (2014). Psychosocial barriers to sexual intimacy for older people. *British Journal of Nursing*, *23*(6), 327-331. https://doi.org/10.12968/bjon.2014.23.6.327

Giles, G. G., Severi, G., English, D. R., McCredie, M. R. E., Borland, R., Boyle, P., & Hopper, J. L. (2003). Sexual factors and prostate cancer. *BJU International*, *92*(3), 211-216. https://doi.org/10.1046/j.1464-410X.2003.04319.x

Gjorgov, A. N. (1978). Barrier contraceptive practice and male infertility as related factors to breast cancer in married women. *Medical Hypotheses*, *4*(2), 79-88. https://doi.org/10.1016/0306-9877(78)90051-8

Goldsmith, K. M., Dunkley, C. R., Dang, S. S., & Gorzalka, B. B. (2016). Sexuality and romantic relationships: Investigating the relation between attachment style and sexual satisfaction. *Sexual and Relationship Therapy*, *31*(2), 190-206. https://doi.org/10.1080/14681994.2016.1158804

Graziottin, A., Serafini, A., & Palacios, S. (2009). Aetiology, diagnostic algorithms and prognosis of female sexual dysfunction. *Maturitas*, *63*(2), 128-134. https://doi.org/10.1016/j.maturitas.2009.04.007

Griffin, D. W., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology*, *67*(3), 430-445. https://doi.org/10.1037/0022-3514.67.3.430

Guerrero, L. K. (2022). Attachment theory: A communication perspective. In D. O. Braithwaite & P. Schrodt (Eds.), *Engaging theories in interpersonal communication* (2nd ed., pp. 299-313). Routledge.

Guerrero, L. K., & Afifi, W. A. (1995). Some things are better left unsaid: Topic avoidance in family relationships. *Communication Quarterly*, *43*(3), 276-296. https://doi.org/10.1080/01463379509369977

Guerrero, L. K., Farinelli, L., & McEwan, B. (2009). Attachment and relational satisfaction: The mediating effect of emotional communication. *Communication Monographs*, *76*(4), 487-514. https://doi.org/10.1080/03637750903300254

Gump, B. B., Polk, D. E., Kamarck, T. W., & Shiffman, S. M. (2001). Partner interactions are associated with reduced blood pressure in the natural environment: Ambulatory monitoring evidence from a healthy, multiethnic adult sample. *Psychosomatic Medicine*, *63*(3), 423-433. https://doi.org/10.1097/00006842-200105000-00011

Gunzler, D., Chen, T., Wu, P., & Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling. *Shanghai Archives of Psychiatry*, *25*(6), 390-394. https://doi.org/10.3969/j.issn.1002-0829.2013.06.009

Hahn, J., Hausman, J., & Kuersteiner, G. (2004). Estimation with weak instruments: Accuracy of higher-order bias and MSE approximations. *The Econometrics Journal*, *7*(1), 272-306. https://doi.org/10.1111/j.1368-423X.2004.00131.x

Hair, J., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). *Multivariate data analysis* (8th ed.). Prentice Hall.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage.

Hample, D., & Cionea, I. A. (2012). Serial arguments in inter-ethnic relationships. *International Journal of Intercultural Relations, 36*(3), 430-445. https://doi.org/10.1016/j.ijintrel.2011.12.006

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.

Hayes, A. F. (2021). *The PROCESS macro for SPSS and SAS*. http://www.processmacro.org/

Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*(1), 511-524. https://doi.org/10.1037/0022-3514.52.3.511

Hazan, C., & Zeifman, D. (1999). Pair bonds as attachments. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 336-354). Guilford Publications.

Heinemann, J., Atallah, S., & Rosenbaum, T. (2016). The impact of culture and ethnicity on sexuality and sexual function. *Current Sexual Health Reports, 8*(3), 144-150. https://doi.org/10.1007/s11930-016-0088-8

Herbenick, D., Eastman-Mueller, H., Fu, T. C., Dodge, B., Ponander, K., & Sanders, S. A. (2019). Women's sexual satisfaction, communication, and reasons for (no longer) faking orgasm: Findings from a US probability sample. *Archives of Sexual Behavior, 48*(8), 2461-2472. https://doi.org/10.1007/s10508-019-01493-0

Herold, E. S., & Way, L. (1988). Sexual self-disclosure among university women. *Journal of Sex Research, 24*(1), 1-14. https://doi.org/10.1080/00224498809551394

Hess, J. A., & Coffelt, T. A. (2012). Verbal communication about sex in marriage: Patterns of language use and its connection with relational outcomes. *Journal of Sex Research, 49*(6), 603-612. https://doi.org/10.1080/00224499.2011.619282

Hesse, C., & Trask, S. L. (2014). Trait affection and adult attachment styles: Analyzing relationships and group differences. *Communication Research Reports, 31*(1), 53-61. https://doi.org/10.1080/08824096.2013.844118

Higgins, J. A., Mullinax, M., Trussell, J., Davidson, K., & Moore, N. B. (2011). Sexual satisfaction and sexual health among university students in the United States. *American Journal of Public Health, 101*(9), 1643-1654. https://doi.org/10.2105/AJPH.2011.300154

Holland, K. J., & French, S. E. (2012). Condom negotiation strategy use and effectiveness among college students. *Journal of Sex Research, 49*(5), 443-453. https://doi.org/10.1080/00224499.2011.568128

Holmes, K. K., Levine, R., & Weaver, M. (2004). Effectiveness of condoms in preventing sexually transmitted infections. *Bulletin of the World Health Organization, 82*(6), 454-461. http://www.ncbi.nlm.nih.gov/pmc/articles/pmc2622864/

Holt-Lunstad, J., Birmingham, W., & Jones, B. Q. (2008). Is there something unique about marriage? The relative impact of marital status, relationship quality, and network social support on ambulatory blood pressure and mental health. *Annals of Behavioral Medicine, 35*(2), 239-244. https://doi.org/10.1007/s12160-008-9018-y

Hu, L., & Bentler, P. (1999). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods, 3*, 424-453. https://doi.org/10.1037/1082-989X.3.4.424

Hunter, J. E., & Gerbing, D. W. (1982). Unidimensional measurement, second order factor

analysis, and causal models. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 4, pp. 267-320). JAI Press.

Impett, E. A., Strachman, A., Finkel, E. J., & Gable, S. L. (2008). Maintaining sexual desire in intimate relationships: The importance of approach goals. *Journal of Personality and Social Psychology*, *94*(5), 808-823. https://doi.org/10.1037/0022-3514.94.5.808

Jaafarpour, M., Khani, A., Khajavikhan, J., & Suhrabi, Z. (2013). Female sexual dysfunction: Prevalence and risk factors. *Journal of Clinical & Diagnostic Research*, *7*(12), 2877-2880. http://doi.org/10.7860/JCDR/2013/6813.3822

Jaccard, J., Dittus, P. J., & Gordon, V. V. (1998). Parent-adolescent congruency in reports of adolescent sexual behavior and in communications about sexual behavior. *Child Development*, *69*(1), 247-261. https://doi.org/10.1111/j.1467-8624.1998.tb06146.x

Jankowiak, W. R., & Paladino, T. (2008). Desiring sex, longing for love: A tripartite conundrum. In W. R. Jankowaik (Ed.), *Intimacy: Love and sex across cultures* (pp. 1-36). Columbia University Press.

Jiang, L., & Hancock, J. T. (2013). Absence makes the communication grow fonder: Geographic separation, interpersonal media, and intimacy in dating relationships. *Journal of Communication*, *63*(3), 556-577. https://doi.org/10.1111/jcom.12029

Johnson, D. R., & Young, R. (2011). Toward best practices in analyzing datasets with missing data: Comparisons and recommendations. *Journal of Marriage and Family*, *73*(5), 926–945. https://doi.org/10.1111/j.1741-3737.2011.00861.x.

Jones, J. T., & Cunningham, J. D. (1996). Attachment styles and other predictors of relationship satisfaction in dating couples. *Personal Relationships*, *3*(4), 387-399. https://doi.org/10.1111/j.1475-6811.1996.tb00123.x

Kahr, B. (2009). *Who's been sleeping in your head: The secret world of sexual fantasies*. Basic Books.

Kelly, M. P., Strassberg, D. S., & Turner, C. M. (2004). Communication and associated relationship issues in female anorgasmia. *Journal of Sex & Marital Therapy*, *30*, 263-276. https://doi.org/10.1007/s10508-011-9874-6

Kenny, D. A. (2021). *Mediation*. https://davidakenny.net/cm/mediate.htm

Kentjana, Y. V. (2021). *The relationship between emotional intimacy and sexual satisfaction: The mediating role of sexual communication satisfaction* [Unpublished master's thesis]. Utrecht University.

Khoury, C. B., & Findlay, B. M. (2014). What makes for good sex? The associations among attachment style, inhibited communication and sexual satisfaction. *Journal of Relationships Research*, *5*(7), 1-11. https://doi.org/10.1017/jrr.2014.7

Knobloch, L. K. (2008). The content of relational uncertainty within marriage. *Journal of Social and Personal Relationships*, *25*(3), 467-495. https://doi.org/10.1177/0265407508090869

Knobloch, L. K., & Carpenter-Theune, K. E. (2004). Topic avoidance in developing romantic relationships: Associations with intimacy and relational uncertainty. *Communication Research*, *31*(2), 173-205. https://doi:10.1177/0093650203261516

Knobloch, L. K., & Solomon, D. H. (1999). Measuring the sources and content of relational uncertainty. *Communication Studies*, *50*(4), 261-278. https://doi:10.1080/10510979909388499

Knobloch, L. K., & Solomon, D. H. (2002). Information seeking beyond initial interaction: Negotiating relational uncertainty within close relationships. *Human Communication Research*, *28*(2), 243-257. https://doi.org/10.1111/j.1468-2958.2002.tb00806.x

Kraus, F. (2017). The practice of masturbation for women: The end of a taboo? *Sexologies*, *26*(4), 35-41. https://doi.org/10.1016/j.sexol.2017.09.009

Kuang, K., & Gettings, P. E. (2021). Uncertainty management in sexual communication: Testing the moderating role of marital quality, relational closeness, and communal coping. *Health Communication*, *36*(11), 1368-1377. https://doi.org/10.1080/10410236.2020.1751401

La France, B. H. (2010). Predicting sexual satisfaction in interpersonal relationships. *Southern Communication Journal*, *75*(3), 195-214. https://doi.org/10.1080/10417940902787939

Laumann, E. O., Paik, A., Glasser, D. B., Kang, J., Wang, T., Levinson, B., Moreira, E., Gingell, C. (2006). A cross-national study of subjective sexual well-being among older women and men: Findings from the Global Study of Sexual Attitudes and Behaviors. *Archives of Sexual Behavior*, *35*(2), 145-161. https://doi.org/10.1007/s10508-005-9005-3

Laumann, E. O., Paik, A., & Rosen, R. C. (1999). Sexual dysfunction in the United States: Prevalence and predictors. *JAMA*, *281*(6), 537-544. https://doi.org/10.1001/jama.281.6.537

Lawrance, K. A., & Byers, E. S. (1995). Sexual satisfaction in long-term heterosexual relationships: The interpersonal exchange model of sexual satisfaction. *Personal Relationships*, *2*(4), 267-285. https://doi.org/10.1111/j.1475-6811.1995.tb00092.x

Lê, M. G., Bacheloti, A., & Hill, C. (1989). Characteristics of reproductive life and risk of breast cancer in a case-control study of young nulliparous women. *Journal of Clinical Epidemiology*, *42*(12), 1227-1233. https://doi.org/10.1016/0895-4356(89)90121-2

Lebow, J. L., Chambers, A. L., Christensen, A., & Johnson, S. M. (2012). Research on the treatment of couple distress. *Journal of Marital & Family Therapy, 38*(1), 145-168. https://doi.org/10.1111/j.1752-0606.2011.00249.x

Lee, A., & Hankin, B. L. (2009). Insecure attachment, dysfunctional attitudes, and low self-esteem predicting prospective symptoms of depression and anxiety during adolescence. *Journal of Clinical Child & Adolescent Psychology*, *38*(2), 219-231. https://doi.org/10.1080/15374410802698396

Lehmiller, J. J. (2018). *Tell me what you want: The science of sexual desire and how it can help you improve your sex life*. Go Hachette.

Leitzmann, M. F., Platz, E. A., Stampfer, M. J., Willett, W. C., & Giovannucci, E. (2004). Ejaculation frequency and subsequent risk of prostate cancer. *JAMA*, *291*(13), 1578-1586. https://doi.org/10.1001/jama.291.13.1578

Levin, R. J. (2003). Do women gain anything from coitus apart from pregnancy? Changes in the human female genital tract activated by coitus pain disorders: Responses to a web-based survey. *Journal of Sex & Marital Therapy*, *29*(1), 59-69. https://doi.org/10.1080/713847134

Li, H., Gao, T., & Wang, R. (2016). The role of the sexual partner in managing erectile dysfunction. *Nature Reviews Urology*, *13*(3), 168-177. https://doi.org/10.1038/nrurol.2015.315

Little, R. J., & Rubin, D. B. (2019). *Statistical analysis with missing data* (3rd ed.). John Wiley & Sons.

Littlejohn, S. W., Foss, K. A., & Oetzel, J. G. (2021). *Theories of human communication* (12th ed.). Waveland Press.

Lopez Portillo, B. (2017). D-love. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of personality and individual differences* (pp. 1-3). Springer.

Lopez Portillo, B. (2020). *Individual differences in sexual self-disclosure: The role of personality and attachment in romantic relationships.* [Unpublished doctoral dissertation]. University of Sydney.

Machette, A. T. (2022a). Sexual communication discrepancies in married individuals. *International Journal of Sexual Health*, *34*(2), 233-241. https://doi.org/10.1080/19317611.2021.2015037

Machette, A. T. (2022b). "Let's not talk about that": A case study for expectancy violations theory. In A. L. Meluch & H. Walter (Eds.), *Casing conflict communication* (pp. 11-18). Kendall Hunt.

Machette, A. T., & Cionea, I. A. (2023). *Sexual communication privacy management in romantic relationships*. [Unpublished manuscript]. Department of Communication, University of Oklahoma, Norman, Oklahoma.

Machette, A. T., & Drouin, M. (2023). *Antecedents of interpersonal sexual communication: A traits perspective.* [Manuscript submitted for publication]. Department of Communication, University of Oklahoma, Norman, Oklahoma.

Machette, A. T., & Montgomery-Vestecka, G. (2023a). Too much of a good thing?: Applying sexual scripts theory to sexual communication discrepancies. *Communication Reports*. Advanced online publication. http://doi.org/10.1080/08934215.2023.2175004

Machette, A. T., & Montgomery-Vestecka, G. (2023b). *Sexual communication discrepancies and sexual function.* [Manuscript submitted for publication]. Department of Communication, University of Oklahoma, Norman, Oklahoma.

Machette, A. T., Morrissey, B. S., & Cionea, I. A. (2022). The Sexual Communication Discrepancy Index: A multidimensional self-report instrument for the assessment of

sexual communication discrepancies. *Journal of Sex & Marital Therapy*, *48*(4), 376-391. http://dx.doi.org/10.1080/0092623X.2021.1998272

MacNeil, S., & Byers, E. S. (2005). Dyadic assessment of sexual self-disclosure and sexual satisfaction in heterosexual dating couples. *Journal of Social and Personal Relationships*, *22*(2), 169-181. https://doi.org/10.1177/0265407505050942

MacNeil, S., & Byers, E. S. (2009). Role of sexual self-disclosure in the sexual satisfaction of long-term heterosexual couples. *Journal of Sex Research*, *46*(1), 3-14. https://doi.org/10.1080/00224490802398399

Mallory, A. B. (2022). Dimensions of couples' sexual communication, relationship satisfaction, and sexual satisfaction: A meta-analysis. *Journal of Family Psychology*, *36*(3), 358-371. https://doi.org/10.1037/fam0000946

Mark, K. P., & Jozkowski, K. N. (2013). The mediating role of sexual and nonsexual communication between relationship and sexual satisfaction in a sample of college-age heterosexual couples. *Journal of Sex & Marital Therapy*, *39*(5), 410-427. https://doi.org/10.1080/0092623X.2011.644652

Mark, K. P., Vowels, L. M., & Murray, S. H. (2018). The impact of attachment style on sexual satisfaction and sexual desire in a sexually diverse sample. *Journal of Sex & Marital Therapy*, *44*(5), 450-458. https://doi.org/10.1080/0092623X.2017.1405310

Masters, W. H., & Johnson, V. E. (1970). *Human sexual inadequacy*. Little, Brown.

McCabe, M. P., Hertlein, K. M., & Davis, E. (2020). Female orgasmic disorder. In K. M. Hertlein, N. Gambescia, & G. R. Weeks (Eds.), *Systematic sex therapy* (pp. 130-144). Routledge.

McCarthy, B. W., & Fucito, L. M. (2005). Integrating medication, realistic expectations, and therapeutic interventions in the treatment of male sexual dysfunction. *Journal of Sex & Marital Therapy*, *31*(4), 319-328. https://doi.org/10.1080/00926230590950226

Mikulincer, M. (1998). Attachment working models and the sense of trust: An exploration of interaction goals and affect regulation. *Journal of Personality and Social Psychology*, *74*(5), 1209-1224. https://doi.org/10.1037/0022-3514.74.5.1209

Ménard, A. D., & Offman, A. (2009). The interrelationships between sexual self-esteem, sexual assertiveness and sexual satisfaction. *The Canadian Journal of Human Sexuality*, *18*(1-2), 35-45.

Meston, C. M., Hull, E., Levin, R. J., & Sipski, M. (2004). Disorders of orgasm in women. *The Journal of Sexual Medicine*, *1*(1), 66-68. https://doi.org/10.1111/j.1743-6109.2004.10110.x

Metts, S., & Cupach, W. R. (1989). The role of communication in human sexuality. In K. McKinney & S. Sprecher (Eds.), *Human sexuality: The societal and interpersonal context* (pp. 139-161). Ablex.

Miller, L. C., & Kenny, D. A. (1986). Reciprocity of self-disclosure at the individual and dyadic levels: A social relations analysis. *Journal of Personality and Social Psychology*, *50*(4), 713-719. https://doi.org/10.1037/0022-3514.50.4.713

Montesi, J. L., Conner, B. T., Gordon, E. A., Fauber, R. L., Kim, K. H., & Heimberg, R. G. (2013). On the relationship among social anxiety, intimacy, sexual communication, and sexual satisfaction in young couples. *Archives of Sexual Behavior*, *42*(1), 81-91. https://doi.org/10.1007/s10508-012-9929-3

Montesi, J. L., Fauber, R. L., Gordon, E. A., & Heimberg, R. G. (2010). The specific importance of communicating about sex to couples' sexual and overall relationship satisfaction. *Journal of Social and Personal Relationships, 28*(5), 591-609. https://doi.org/10.1177/0265407510386833

Muin, D. A., Wolzt, M., Marculescu, R., Rezaei, S. S., Salama, M., Fuchs, C., ... & Bayerle-Eder, M. (2015). Effect of long-term intranasal oxytocin on sexual dysfunction in premenopausal and postmenopausal women: A randomized trial. *Fertility and Sterility, 104*(3), 715-723. https://doi.org/10.1016/j.fertnstert.2015.06.010

Muise, A., Maxwell, J. A., & Impett, E. A. (2018). What theories and methods from relationship research can contribute to sex research. *Journal of Sex Research, 55*(4/5), 540-562. https://doi.org/10.1080/00224499.2017.1421608

Muthén, L. K.., & Muthén, B. O. (2021). *MPlus* (Version 8.6). [Computer Software]. Los Angeles, CA: Muthén & Muthén.

Noar, S. M., Carlyle, K., & Cole, C. (2006). Why communication is crucial: Meta-analysis of the relationship between safer sexual communication and condom use. *Journal of Health Communication, 11*(4), 365-390. https://doi.org/10.1080/10810730600671862

Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and Family, 45*(1), 141-151. https://doi.org/10.2307/351302

Oattes, M. K., & Offman, A. (2007). Global self-esteem and sexual self-esteem as predictors of sexual communication in intimate relationships. *The Canadian Journal of Human Sexuality, 16*(3-4), 89-100.

Osborne, J. W. (2013). *Best practices in data cleaning: A complete guide to everything you need to do before and after collecting your data*. Sage.

Palan, S., & Schitter, C. (2018). Prolific: A subject pool for online experiments. *Journal of Behavioral and Experimental Finance, 17*(1), 22-27. https://doi.org/10.1016/j.jbef.2017.12.004

Pariera, K. L. (2016). Barriers and prompts to parent-child sexual communication. *Journal of Family Communication, 16*(3), 277-283. https://doi.org/10.1080/15267431.2016.1181068

Park, Y., Impett, E. A., MacDonald, G., & Lemay Jr., E. P. (2019). Saying "thank you": Partners' expressions of gratitude protect relationship satisfaction and commitment from the harmful effects of attachment insecurity. *Journal of Personality and Social Psychology, 117*(4), 773-807. https://doi.org/10.1037/pspi0000178

Peasant, C., Parra, G. R., & Okwumabua, T. M. (2015). Condom negotiation: Findings and future directions. *Journal of Sex Research, 52*(4), 470-483. https://doi.org/10.1080/00224499.2013.868861

Peer, E., Vosgerau, J., & Acquisti, A. (2014). Reputation as a sufficient condition for data quality on Amazon Mechanical Turk. *Behavior Research Methods, 46*(4), 1023-1031. https://doi.org/10.3758/s13428-013-0434-y

Peixoto, M. M., Amarelo-Pires, I., Pimentel Biscaia, M. S., & Machado, P. P. (2018). Sexual self-esteem, sexual functioning and sexual satisfaction in Portuguese heterosexual university students. *Psychology & Sexuality*, *9*(4), 305-316. https://doi.org/10.1080/19419899.2018.1491413

Piha, S., Hurmerinta, L., Sandberg, B., & Järvinen, E. (2018). From filthy to healthy and beyond: Finding the boundaries of taboo destruction in sex toy buying. *Journal of Marketing Management, 34*(13-14), 1078-1104. https://doi.org/10.1080/0267257X.2018.1496946

Proulx, C. M., Helms, H. M., & Buehler, C. (2007). Marital quality and personal well-being: A meta-analysis. *Journal of Marriage and Family, 69*(3), 576-593. https://doi.org/10.1111/j.1741-3737.2007.00393.x

Quina, K., Harlow, L. L., Morokoff, P. J., Burkholder, G., & Deiter, P. J. (2000). Sexual communication in relationships: When words speak louder than actions. *Sex Roles*, *42*(7-8), 523-549. http://doi.org/10.1023/A:1007043205155

Regan, P. C. (2000). The role of sexual desire and sexual activity in dating relationships. *Social Behavior and Personality*, *28*(1), 51-59. https://doi.org/10.2224/sbp.2000.28.1.51

Rehman, U. S., Rellini, A. H., & Fallis, E. (2011). The importance of sexual self-disclosure to sexual satisfaction and functioning in committed relationships. *Journal of Sexual Medicine*, *8*(11), 3108-3115. https://doi.org/10.1111/j.1743-6109.2011.02439.x

Reis, H. T., Wheeler, L., Kernis, M. H., Spiegel, N., & Nezlek, J. (1985). On specificity in the impact of social participation on physical and psychological health. *Journal of Personality and Social Psychology*, *48*(2), 456-471. https://doi.org/10.1037/0022-3514.48.2.456

Richards, R. J. (2021). *To disclose or not disclose: The proposition and test of the sexual self-disclosure decision model (SS-DDM)* [Unpublished doctoral dissertation]. University of Wisconsin-Milwaukee.

Robles, T. F., Slatcher, R. B., Trombello, J. M., & McGinn, M. M. (2014). Marital quality and health: A meta-analytic review. *Psychological Bulletin, 140*(1), 140-187. https://doi.org/10.1037/a0031859

Robinson, I. E., Balkwell, J. W., & Ward, D. M. (1980). Meaning and behavior: An empirical study in sociolinguistics. *Social Psychology Quarterly, 43*(2), 253-258. https://doi.org/10.2307/3033628

Rosen, R. C. (2000). Prevalence and risk factors of sexual dysfunction in men and women. *Current Psychiatry Reports*, *2*(3), 189-195. https://doi.org/10.1007/s11920-996-0006-2

Rubin, H., & Campbell, L. (2012). Day-to-day changes in intimacy predict heightened relationship passion, sexual occurrence, and sexual satisfaction: A dyadic diary analysis. *Social Psychological and Personality Science, 3*(2), 224-231. https://doi.org/10.1177/1948550611416520

Sanders, S. A., & Reinisch, J. M. (1999). Would you say you had sex if...?. *JAMA, 281*(3), 275-277. https://doi.org/10.1001/jama.281.3.275

Sardeshmukh, S. R., & Vandenberg, R. J. (2017). Integrating moderation and mediation: A structural equation modeling approach. *Organizational Research Methods*, *20*(4), 721-745. https://doi.org/10.1177/1094428115621609

Schoenfeld, E. A., Loving, T. J., Pope, M. T., Huston, T. L., & Štulhofer, A. (2017). Does sex really matter? Examining the connections between spouses' nonsexual behaviors, sexual frequency, sexual satisfaction, and marital satisfaction. *Archives of Sexual Behavior, 46*(1), 489-501. https://doi.org/10.1007/s10508-015-0672-4

Seal, D. W., Smith, M., Coley, B., Perry, J., & Gamez, M. (2008). Urban heterosexual couples' sexual scripts for three shared sexual experiences. *Sex Roles, 58*(9-10), 626-638. https://doi.org/10.1007/s11199-007-9369-z

Seidman, S. (2014). *The social construction of sexuality*. W. W. Norton.

Shamloul, R., & Ghanem, H. (2013). Erectile dysfunction. *The Lancet*, *381*(9861), 153-165. https://doi.org/10.1016/S0140-6736(12)60520-0

Sheeran, P., Abraham, C., & Orbell, S. (1999). Psychosocial correlates of heterosexual condom use: A meta-analysis. *Psychological Bulletin*, *125*(1), 90-132. https://doi.org/10.1037/0033-2909.125.1.90

Simon, W., & Gagnon, J. H. (1984). Sexual scripts. *Society*, *22*(1), 53-60. https://doi.org/10.1007/BF02701260

Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of Sexual Behavior*, *15*(1), 97-120. https://doi.org/10.1007/BF01542219

Simpson, J. A., & Rholes, W. S. (2017). Adult attachment, stress, and romantic relationships. *Current Opinion in Psychology*, *13*(1), 19-24. https://doi.org/10.1016/j.copsyc.2016.04.006

Smith, A., Lyons, A., Ferris, J., Richters, J., Pitts, M., Shelley, J., & Simpson, J. M. (2011). Sexual and relationship satisfaction among heterosexual men and women: The importance of desired frequency of sex. *Journal of Sex & Marital Therapy*, *37*(2), 104-115. https://doi.org/10.1080/0092623X.2011.560531

Snell, W. E., Belk, S. S., & Papini, D. R. (1989). Development and validation of the sexual self-disclosure scale. *Annals of Sex Research*, *24*(4), 307-334. https://doi.org/10.1007/BF00849749

Snell, W. E., & Quinn-Nilas, C. (2019). Sexual self-disclosure scale. In R. R. Milhausen, J. K. Sakaluk, T. D. Fisher, C. M. Davis, & W. L. Yarber (Eds.), *Handbook of sexuality-related measures* (pp. 241-247). Routledge.

Solomon, D. H., & Knobloch, L. K. (2004). A model of relational turbulence: The role of intimacy, relational uncertainty, and interference from partners in appraisals of irritations. *Journal of Social and Personal Relationships, 21*(6), 795-816. https://doi.org/10.1177/0265407504047838

Sonenstein, F. L., Ku, L., & Pleck, J. H. (1997). Measuring sexual behavior among teenage males in the United States. In J. Bancroft (Ed.), *Researching sexual behavior: Methodological issues* (pp. 87-105). Indiana University Press.

Soper, D. (2023). *Calculator: A-priori sample size for structural equation models*. Free a-priori sample size calculator for structural equation models. Retrieved from https://www.danielsoper.com/statcalc/calculator.aspx?id=89

Sprecher, S. (2002). Sexual satisfaction in premarital relationships: Associations with satisfaction, love, commitment, and stability. *Journal of Sex Research, 39*(3), 190-196. https://doi.org/10.1080/00224490209552141

Sprecher, S., & Cate, R. M. (2004). Sexual satisfaction and sexual expression as predictors of relationship satisfaction and stability. In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 245-266). Psychology Press.

Sprecher, S., Christopher, F. S., & Cate, R. (2006). Sexuality in close relationships. In A. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 463-482). Cambridge University Press. https://doi.org/10.1017/CBO9780511606632.026

Sprecher, S., & Treger, S. (2015). The benefits of turn-taking reciprocal self-disclosure in get acquainted interactions. *Personal Relationships*, *22*(3), 460-475. https://doi.org/10.1111/pere.12090

Sprecher, S., Treger, S., & Wondra, J. D. (2013). Effects of self-disclosure role on liking, closeness, and other impressions in get-acquainted interactions. *Journal of Social and Personal Relationships*, *30*(4), 497-514. https://doi.org/10.1177/0265407512459033

Stadler, G., Snyder, K. A., Horn, A. B., Shrout, P. E., & Bolger, N. P. (2012). Close relationships and health in daily life: A review and empirical data on intimacy and somatic symptoms. *Psychosomatic Medicine*, *74*(4), 398-409. https://doi.org/10.1097/PSY.0b013e31825473b8

Stuart, F. M., Hammond, D. C., & Pett, M. A. (1987). Inhibited sexual desire in women. *Archives of Sexual Behavior, 16*(1), 91-106. https://doi.org/10.1007/BF01542064

Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior, 7*(3), 321-326. https://doi.org/10.1089/1094931041291295

Tabachnick, B. G., Fidell, L. S. (2018). *Using multivariate statistics* (Vol. 6). Pearson.

Theiss, J. A. (2011). Modeling dyadic effects in the associations between relational uncertainty, sexual communication, and sexual satisfaction for husbands and wives. *Communication Research*, *38*(4), 565-584. https://doi.org/10.1177/0093650211402186

Theiss, J. A., & Estlein, R. (2014). Antecedents and consequences of the perceived threat of sexual communication: A test of the relational turbulence model. *Western Journal of Communication, 78*(4), 404-425. https://doi.org/10.1080/10570314.2013.845794

Theiss, J. A., & Solomon, D. H. (2008). Parsing the mechanisms that increase relational intimacy: The effects of uncertainty amount, open communication about uncertainty, and the reduction of uncertainty. *Human Communication Research, 34*(4), 625-654. https://doi.org/10.1111/j.1468-2958.2008.00335.x

Thomas, H. N., Hess, R., & Thurston, R. C. (2015). Correlates of sexual activity and satisfaction in midlife and older women. *The Annals of Family Medicine, 13*(4), 336-342. https://doi.org/10.1370/afm.1820

Timm, T. M., & Keiley, M. K. (2011). The effects of differentiation of self, adult attachment, and sexual communication on sexual and marital satisfaction: A path analysis. *Journal of Sex & Marital Therapy, 37*(3), 206-223. https://doi.org/10.1080/0092623X.2011.564513

Ullman, S. E., Foynes, M. M., & Tang, S. S. S. (2010). Benefits and barriers to disclosing sexual trauma: A contextual approach. *Journal of Trauma Dissociation, 11*(2), 127-133. https://doi.org/10.1080/15299730903502904

Whipple, B., & Komisaruk, B. R. (1988). Analgesia produced in women by genital self-stimulation. *Journal of Sex Research, 24*(1), 130-140. https://doi.org/10.1080/00224498809551403

Wiederman, M. W. (2005). The gendered nature of sexual scripts. *The Family Journal, 13*(4), 496-502. https://doi.org/10.1177/1066480705278729

Widman, L., Noar, S. M., Choukas-Bradley, S., & Francis, D. B. (2014). Adolescent sexual health communication and condom use: A meta-analysis. *Health Psychology, 33*(10), 1113-1124. https://doi.org/10.1037/hea0000112

Wincze, J. P., & Weisberg, R. B. (2015). *Sexual dysfunction: A guide for assessment and treatment* (3rd ed.). Guilford Press.

Witting, K., Santtila, P., Varjonen, M., Jern, P., Johansson, A., Von Der Pahlen, B., & Sandnabba, K. (2008). Couples' sexual dysfunctions: Female sexual dysfunction, sexual distress, and compatibility with partner. *The Journal of Sexual Medicine, 5*(11), 2587-2599. https://doi.org/10.1111/j.1743-6109.2008.00984.x

Xiao, Z., Li, X., Qiao, S., Zhou, Y., Shen, Z., & Tang, Z. (2015). Using communication privacy management theory to examine HIV disclosure to sexual partners/spouses among PLHIV in Guangxi. *AIDS Care*, *27*(1), 73-82. https://doi.org/10.1080/09540121.2015.1055229

Yoo, H., Bartle-Haring, S., Day, R. D., & Gangamma, R. (2014). Couple communication, emotional and sexual intimacy, and relationship satisfaction. *Journal of Sex & Marital Therapy*, *40*(4), 275-293. https://doi.org/10.1080/0092623X.2012.751072

Appendix A

Experiences in Close Relationship Scale - Short Version

Please think about your relationship with your current romantic and sexual partner. With your partner in mind, please indicate your level of agreement with each of the following statements.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

1. It helps to turn to my romantic partner in times of need. *
2. I want to get close to my partner, but I keep pulling back.
3. I turn to my partner for many things, including comfort and reassurance. *
4. I try to avoid getting too close to my partner.
5. I usually discuss my problems and concerns with my partner. *
6. I am nervous when partners get too close to me.
7. I need a lot of reassurance that I am loved by my partner.
8. I find that my partner(s) don't want to get as close as I would like.
9. My desire to be very close sometimes scares people away.
10. I do not often worry about being abandoned. *
11. I get frustrated if romantic partners are not available when I need them.
12. I worry that romantic partners won't care about me as much as I care about them.

*Reverse score items

The Experiences in Close Relationship Scale is composed of two dimensions. The first, avoidant attachment, is captured by items 1-6. The second dimension, anxious attachment, is captured by items 7-12.

Appendix B

Sexual Communication Discrepancy Index

For the following items, please think about your ideal sexual relationship with your current romantic and sexual partner. Some items will apply to your relationship more than others. If you are in a non-monogamous relationship, please choose one of these partners and think about your ideal sexual relationship with him/her.
Rate your level of agreement with each statement below.

(Expected subscale) In an ideal sexual relationship, I expect to talk with my partner about…
(Actual subscale) In my current sexual relationship, I talk with my partner about…

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

1. how to spice up our sex life
2. trying different positions during sex
3. how to improve our sex life
4. how to take our sex life to the next level
5. positive aspects of our sex life
6. emotional intimacy related to sex
7. what feels pleasurable during sex
8. what arouses us sexually
9. how to both have orgasms
10. how to reach orgasm
11. having various types of sex
12. talking dirty to each other
13. our sexual fantasies
14. our sexual fetishes
15. our masturbation preferences
16. issues occurring during sex
17. negative aspects of our sex life
18. what does not bring us pleasure during sex
19. difficulties with having sex
20. experiencing pain during sex
21. discomfort during sex
22. using contraception
23. contraceptive options
24. the consequences of unprotected sex

Subscales

The SCDI is comprised of four sub-dimensions. The first, sexual relationship maintenance, consists of items 1-11. The second, sexual experimentation, includes items 12-15. The third, sexual issues, is comprised of 16-21. The fourth, safe sex, includes items 22-24.

The scale can be calculated as one overall score or as one score per each dimension.

Appendix C

Sexual Self-Disclosure Questionnaire

Think about your sexual relationship with your romantic and sexual partner. For each question below, select the option that best describes how much **you** communicate to your partner about your sexual likes and dislikes.

Never 1 2 3 4 5 6 7 Always

1. The way(s) you like to be kissed?
2. The way(s) you **don't** like to be kissed?
3. The way(s) you like to be touched sexually?
4. The way(s) you **don't** like to be touched sexually?
5. The way(s) you like to have intercourse?
6. The way(s) you **don't** like to have intercourse?
7. The way(s) you like receiving oral sex?
8. The way(s) you **don't** like receiving oral sex?
9. The way(s) you like giving oral sex?
10. The way(s) you **don't** like giving oral sex?
11. What you like about the amount of variety in your sex life?
12. What you **don't** like about the amount of variety in your sex life?

Appendix D

Quality of Marriage Index

When answering the following questions, think about your romantic relationship. With your partner in mind, please indicate your level of agreement with each of the following statements.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

1. We have a good relationship.
2. My relationship with my partner is very stable.
3. Our relationship is very strong.
4. My relationship with my partner makes me happy.
5. I really feel like part of a team with my partner.
6. All things considered, I am happy in my relationship.

Appendix E

Sexual Satisfaction Measure

Thinking about your sex life, please indicate your level of agreement with each item below.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

1. My partner and I have a fulfilling sexual relationship.
2. I find the sexual contact that I have with my partner to be satisfying.
3. My partner always makes sure that I achieve orgasm.
4. I am content with the sexual aspect of our relationship.
5. There are parts of our sexual relationship that need improvement.*
6. I am generally dissatisfied with our sexual relationship.*

*Reverse score items

Appendix F

Demographic Items

Finally, the following questions ask for some basic information about yourself.

What is your age? Please enter a number (e.g., 41).

What is your biological sex?

- Male
- Female
- Non-binary/third gender
- Prefer not to answer

What gender do you mostly identify with?

- Genderfluid or genderqueer
- Man
- Non-binary
- Two-spirit
- Woman
- Prefer to self-identify (Please specify) ____
- Prefer not to answer

What is your sexual orientation?

- Asexual
- Bisexual
- Gay
- Heterosexual/Straight
- Lesbian
- Pansexual
- Queer
- Prefer to self-identify (Please specify) ____
- Prefer not to answer

Do you identify as transgender?

- Yes
- No
- Prefer not to answer

What ethnic/racial group do you mostly identify with?

- American-Indian or Alaska native
- Asian
- Black or African-American
- Native Hawaiian or other Pacific Islander
- Hispanic or Latino/Latina

- White
- A combination of some of the above
- Another ethnicity/race
- I prefer not to answer this question

What is the highest educational level you have achieved?

- High school or less
- Attended college but did not graduate OR currently attending college
- Associate's degree
- Bachelor's degree or equivalent 4-year degree
- Attended graduate school but did not graduate OR currently attending graduate school
- At least one graduate degree earned

What is your relationship status?

- Single
- Dating/committed relationship
- Married or in a cohabiting relationship
- Widowed
- Divorced
- Separated
- Civil union
- Other

How long have you been in a romantic relationship with your current partner? Please enter the number of years (e.g., 3.5).

About how often did you have sex during the last 12 months?

- not at all
- once or twice
- once a month
- 2–3 times a month
- weekly
- 2–3 times per week
- 4 or more times per week

In what region of the United States do you live?

- New England (CT, ME, MA, NH, RI, VT)
- Middle Atlantic (NJ, NY, PA)
- East North Central (IN, IL, MI, OH, WI)
- West North Central (IA, KS, MN, MO, NE, ND, SD)
- South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)
- East South Central (AL, KY, MS, TN)
- West South Central (AR, LA, OK, TX)
- Mountain (AZ, CO, ID, NM, MT, UT, NV, WY)
- Pacific (AK, CA, HI, OR, WA)
- I prefer not to answer this question

Please select your religious affiliation, if any.

- Christian
- Muslim
- Jewish
- Buddhist
- Baha'i
- Hindu
- Ancient religion/ancient religion or traditional religion/ancient
- Traditional or folk religion/Folk religion/Spiritist
- Atheist
- Agnostic
- Old Believer
- Something else (Please specify _____)
- Nothing in particular
- I prefer not to answer this question

Please select your yearly household income.

- Less than $10,000
- $10,000 – $19,999
- $20,000 – $29,999
- $30,000 – $39,999
- $40,000 – $49,999
- $50,000 – $59,999
- $60,000 – $69,999
- $70,000 – $79,999
- $80,000 – $89,999
- $90,000 – $99,999
- $100,000 – $149,999
- More than $150,000
- I prefer not to answer this question