We’re Open to Talk about Sex: Conversation Orientation and the Impact on Disclosure and Satisfaction in Sexual Relationships

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Abstract

The aim of this dissertation was to examine sexual self-disclosure in sexual relationships using Social Penetration Theory (SPT) and Family Communication Patterns Theory (FCPT). SPT suggested that after the costs (i.e., risks) and rewards (i.e., benefits) of disclosure were assessed, increased depth and breadth of SSD would lead to more intimacy and greater relationship and sexual satisfaction. Subsequently, the assumptions of FCPT implied that parent-child communication leads to the establishment of a shared reality impacting disclosure in the family. There was also evidence that FCP affected disclosure in future relationships as well. Therefore, it was hypothesized that perceptions of risks and benefits and disclosure would serially mediate the relationship between FCP and satisfaction. Data was collected from 330 participants in emerging adulthood who were currently or recently in a sexual relationship. Results indicated that depth and breadth mediated the relationship between CVO and satisfaction, however, there were no significant findings with CFO or risks and benefits. This indicated that a focus on open communication in families does influence disclosure, yet how risks and benefits to disclosure are perceived are not related to FCP. Women were found to slightly disclose with more depth and breadth and to perceive more benefits of disclosure than men, but there was no difference in satisfaction.

Keywords: social penetration, family communication patterns, sexual self-disclosure, risk/benefit, satisfaction, sexual relationships

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Chapter 1: Introduction

Sex communication encompasses the "discussion of safer sex, sexual health (e.g., sexual history, sexually transmitted infections (STIs)), sexual pleasure, and sexual limits" (Greene & Faulkner, 2005, p. 239). Essentially, it is communication about any sex-related topic. Romantic couples experience significant discomfort and awkwardness when communicating about sex despite acknowledging that sex communication is crucial for their relationship and sexual satisfaction (MacNeil & Byers, 2005; Miller-Ott & Linder, 2013). Parker and Ivanov (2013) interviewed women who explained that even though they were engaging in sexual behavior, they were not comfortable communicating about it. Yet, being able to talk about sex-related topics in romantic relationships, specifically, can be important for the well-being of both partners, individually and as a couple (Byers, 2011; Coffelt & Hess, 2014; Lander & Ramseyer Winter, 2019; Parker & Ivanov, 2013). Through sexual self-disclosure in romantic relationships, individuals can convey their sexual preferences, desires, and past experience (La France, 2019).

The comfort with and willingness to communicate about sex-related topics with sexual partners could stem from sex communication in parent-child relationships. In general, parent-child communication about sex can lead to positive outcomes for future adult relationships. With more depth and breadth in sex communication from parents, adolescents are less likely to participate in risky sexual behaviors, like having multiple sexual partners, inconsistently using contraception, and engaging in sexual activities at an earlier age, which can lead to teen pregnancy and contracting STIs (Hutchinson & Cederbaum; 2011; Karofsky et al., 2000; Widman et al., 2014). Additionally, individuals who reported communicating about sex with their parents also reported a greater likelihood of communication about safe sex with their romantic partners (Dilorio et al., 2000; Widman et al., 2014) and have a greater sense of sexual

well-being (Mastro & Zimmer-Gembek, 2015). Afifi et al. (2008) also found that adolescents responded more positively and openly to parents who were more receptive, informal, and composed. To summarize, research indicates that specifically communicating about sex in parent-child relationships does correlate with positive future outcomes for the child. Yet, it is also important to investigate how family communication patterns, in general, might influence the level of willingness through perceptions of risks and benefits to communication about sex and other commonly uncomfortable topics in future relationships.

Thus, this dissertation argued that perceptions of risks and benefits of disclosure and sexual self-disclosure (SSD) would serially mediate the relationship between family communication patterns and relationship and sexual satisfaction in sexual relationships. Two theories were utilized to guide this dissertation: Social Penetration Theory (SPT) and Family Communication Patterns Theory (FCPT). SPT claims that interpersonal relationships develop and become more committed as partners' disclosures grow both in depth (i.e., the intimacy of the information shared) and breadth (i.e., the range of topics communicated) (Mongeau & Miller-Henningsen, 2015). In the context of disclosures about sex in sexual relationships, SPT would suggest that the more a couple communicates about sex-related topics (e.g., likes and dislikes, sexual history, desires) the couple would become more intimate and, thus, have greater satisfaction in their relationship. However, the assumptions of FCPT imply that parent-child communication leads to the establishment of a shared reality impacting information processing, psychosocial, and behavior outcomes (Koerner et al., 2018). Therefore, individuals may be pre-dispositioned to have more or less sexual disclosure in a sexual relationship due to the influences of their family communication patterns.

Understanding how family communication patterns might influence depth and breadth of sex communication in romantic relationships, and consequently, relationship and sexual satisfaction, is important for a number of reasons. First, factors that influence topic avoidance, in general, is a fundamental communication issue that needs to be addressed in the field of interpersonal communication (Knobloch & Carpenter-Theune, 2004). Understanding the factors that influence the avoidance of certain sex-related topics can lead to more effective communication and useful strategies to breach this topic, which is commonly viewed as taboo (Anderson et al., 2011). Second, relationship and sexual satisfaction have been found to be highly correlated where changes in sexual satisfaction led to changes in relationship satisfaction (Byers, 2011; Coffelt & Hess, 2014; Lander & Ramseyer Winter, 2019; Parker & Ivanov, 2013). Thus, identifying how depth and breadth of sex communication influences sexual satisfaction has important implications for relationship satisfaction and individual well-being. Third, understanding how communication patterns in families might affect communication, specifically disclosure about sex, in future relationships could enable families to create an environment that would improve the sexual health of their children as adults.

This dissertation begins with a review of Social Penetration Theory and Family Communication Patterns Theory in the context of sex communication. To examine the research questions and hypotheses proposed in this dissertation, an online survey was distributed to college-aged adults 18 to 25 years old who were sexually active within 12 months of survey participation. The data were analyzed using tests of mediation and moderation as well as correlational and linear regression analysis while controlling for the relationship type and time in the relationship. Gender differences were also assessed (Note: Following the guidance of journals, such as *Sex Roles*, the term gender will be used in terms of the male-female binary in an

attempt to avoid confusion with the sex-related context of this dissertation. Although it is acknowledged that gender is a term referring to the individual differences of masculinity and femininity, for the purposes of this dissertation, gender differences instead of sex differences will be used to refer to differences between men and women).

Chapter 2: Literature Review

The ability to communicate openly about sex-related topics in romantic relationships is important for the development of intimacy and satisfaction (Montesi et al., 2013). However, it is commonly understood that communicating about sex is uncomfortable and frequently avoided. Nevertheless, positive sex communication has been linked to many positive outcomes for sexual partners, individually and as a couple (Byers, 2011; Coffelt & Hess, 2014; Lander & Ramseyer Winter, 2019; Parker & Ivanov, 2013). The theoretical perspectives of Social Penetration Theory (SPT) and Family Communication Patterns Theory (FCPT) were utilized to examine the potential serially mediating influence of perceptions of risks and benefits and the depth and breadth of SSD on the relationship between family communication patterns and relationship and sexual satisfaction in sexual relationships. Research has supported that depth and breadth of disclosure is associated with family communication patterns, so it is reasonable to hypothesize that variations in *sexual* self-disclosure would correlate with both family communication patterns and feelings of satisfaction in sexual relationships (Keating, 2016; Koerner & Fitzpatrick, 2002; Koesten, 2004).

SPT and FCPT are introduced with a focus on disclosure and sex communication in romantic relationships. SPT is discussed first to set the stage for how disclosure relates to the development of relationships and intimacy. With this in mind, the aspects of the depth and breadth of SSD in sexual relationships will be reviewed. Then, decisions regarding when to disclose sex-related information will be analyzed, with specific attention paid to the benefits and risks of SSD. Finally, FCPT is presented to illustrate how individuals' disclosures in non-family-of-origin relationships are influenced by family communication patterns as well as the impact of gender in relation to disclosure.

Social Penetration Theory

SPT claims that interpersonal relationships develop and become more committed as partners' disclosures grow both in depth (i.e., the intimacy of the information shared) and breadth (i.e., the range of topics communicated) (Carpenter & Greene, 2016; Mongeau & Miller-Henningsen, 2015). This theory assumes that relationship development can be characterized by changes in interpersonal communication (Mongeau & Miller-Henningsen, 2015). Self-disclosure (i.e., revealing information about oneself to another person) is a significant aspect in facilitating the process of intimacy in relationships (Horne & Johnson, 2018). As people expand the depth and breadth of their disclosure, their level of intimacy progresses through SPT's stages of relational development (Mongeau & Miller-Henningsen, 2015).

Through SSD in romantic relationships, individuals can convey their sexual preferences, desires, and past experience (La France, 2019). The more people disclose about sex-related topics in their sexual relationships, the more opportunities arise to discuss those topics. For the purposes of this dissertation, breadth of SSD refers to the number of sex-related topics discussed (e.g., contraceptives, likes and dislikes, sexual satisfaction) while depth refers to the level of intimacy of the sex-related information shared (e.g., from expressing physical pleasure to innermost sexual desires and fantasies). It is important to highlight that while not all sex-related topics would need to be discussed continually (e.g., past sexual partners), many topics are essential to discuss throughout the relationship (e.g., sexual satisfaction) or when a significant change is made (e.g., decision to have children). For example, because people's desires and preferences can change any time, SSD of likes and dislikes is important for negotiating a mutually pleasurable sexual experience throughout the romantic relationship (Anderson et al.,

2011). According to SPT, without these continued disclosures, the relationship may not maintain or progress its level of intimacy.

The Layers of the Onion

Assumptions of SPT would indicate that couples would become more relationally close as greater depth and breadth in sex communication is discussed. A metaphor of an onion is frequently used by SPT to describe the four layers of interpersonal communication (Mongeau & Miller-Henningsen, 2015). As depth and breadth of private information increases, layers are essentially "peeled back" like the layers of an onion to eventually reveal the most intimate details about a person (Carpenter & Greene, 2016). Those layers are, with increasing intimacy: the surface layer, the peripheral layer, the intermediate layer, and the central layer.

The *surface layer* consists of information that can be discerned by looking at the individual (Mongeau & Miller-Henningsen, 2015). There may also be discussion of the weather, an up-coming holiday, or of something in the interaction partners' immediate environment. This information is considered non-intimate and descriptive and is associated with a greater willingness to disclose at all stages of intimacy because of its low cost to the discloser (Ayres, 1979). Surface layer communication could occur with anyone, from a new cashier at a grocery store to a romantic partner (Ayres, 1979). The *peripheral layer* contains any information that an individual would feel comfortable sharing in any social circumstance (Mongeau & Miller-Henningsen, 2015). Discussing a favorite sports team, if they have pets, or where they went to school could all be disclosed in this layer of intimacy (Mongeau & Miller-Henningsen, 2015). This information is also considered to be low cost to the discloser (Ayres, 1979; Taylor & Altman, 1975).

Unlike in the first two layers, greater personal details begin to be introduced at the intermediate layer. The *intermediate layer* would be information that an individual shares infrequently but does not keep purposely hidden (Mongeau & Miller-Henningsen, 2015). Political values and opinions about potentially controversial or sensitive topics could be disclosed in the intermediate layer (Carpenter & Greene, 2016). This information represents higher cost to the discloser (Ayres, 1979). The *central layer* involves deeply personal or private information that is only shared with close others viewed as trustworthy (Mongeau & Miller-Henningsen, 2015). Impactful life experiences and deep fears, goals, hopes, and fantasies would be disclosed in this layer of intimacy (Carpenter & Greene, 2016). This information represents the highest cost to the discloser and is discussed least frequently (Ayres, 1979; Taylor & Altman, 1975). SPT suggests that as information increases in depth and breadth and approaches the central layer, more intimacy is produced because the discloser is illustrating that they trust the interaction partner with that information and value the relationship.

Increasing Relational Intimacy Through Disclosure

With the different layers of information in mind, it is also important to consider how disclosure contributes to relational intimacy. The process of relationship development through self-disclosure is explained through four stages of intimacy: the orientation, exploratory affective, affective, and stable stages (Mongeau & Miller-Henningsen, 2015). Individuals begin at the *orientation stage* where little personal disclosure will occur. This stage is also the first impression stage where individuals will behave in socially desirable and polite ways (Carpenter & Greene, 2016). In this instance, mostly surface level and minimal periphery information, or highly ritualized talk, is disclosed (Allensworth, 1996; Ayres, 1979; Mongeau & Miller-Henningsen, 2015). At this stage, communication is superficial; there is no depth in

communication. Many interactions at the orientation stage end and proceed directly to de-penetration if those interactions are not judged to be beneficial (Allensworth, 1996).

As people begin to mutually discuss more peripheral and some intermediate information, they will be in the *exploratory affective stage* (Mongeau & Miller-Henningsen, 2015). Depth increases slightly at this stage as mutual self-disclosure increases, but interactants avoid disclosing personal or private information. Nonverbal cues, such as eye contact, touch, and body movements, are used in this stage to indicate a desire to increase intimacy (Mongeau & Miller-Henningsen, 2015). Many casual relationships remain at this stage. Those relationships might include casual friends and acquaintances (Carpenter & Greene, 2016).

Then, when people have mutual disclosure at the intermediate level with some central level information, they are at the *affective exchange stage* (Mongeau & Miller-Henningsen, 2015). Because more trust has been established through increased private disclosures, interactants may feel more secure in offering criticism or arguing (Carpenter & Greene, 2016). In the intermediate layer, a person will feel more comfortable disclosing about actions the other person does that bother them and have disagreements about political views that they would have avoided in the previous two layers. They are able to recognize each other's nonverbal quirks or cues, for example, accurately interpreting facial expressions. Friendships and romantic relationships may remain in the affective exchange stage (Carpenter & Greene, 2016; Mongeau & Miller-Henningsen, 2015).

Finally, people are at the *stable stage* when all levels of communication are open (Mongeau & Miller-Henningsen, 2015). Once at the stable stage, it is easier to predict the other person's behavior and reactions to information. Depth and breadth of all layers of communication are efficient and comfortable at this stage (Allensworth, 1996; Mongeau &

Miller-Henningsen, 2015). Communication partners are able to be vulnerable with one another, with secrets and the withholding of information kept to a minimum. Very few relationships progress to this stage of intimacy, which is generally reserved for spouses and close family relationships (Allensworth, 1996; Carpenter & Greene, 2016).

The norm of reciprocity suggests that when a person discloses information, the interaction partner is expected to disclose information of the same value to maintain the level of intimacy in the relationship (Carpenter & Greene, 2016). To increase the level of intimacy in the relationship, the interaction partners would need to mutually disclose more personal information. Thus, if no self-disclosure occurs between people, or it occurs disproportionately, the theory suggests that the relationship would not progress during that period of time (Carpenter & Greene, 2016).

Reward Versus Cost in Relation to Sexual Self-Disclosure

SPT explains that decisions about whether to disclose information with increasing intimacy to an interaction partner are based on the discloser's evaluation of reward versus cost (Taylor & Altman, 1975). SPT's assumptions regarding rewards and costs of disclosure are closely aligned with ideas from Social Exchange Theory. Because of how disclosers evaluate rewards and costs of disclosure, certain sex-related topics may be easier to communicate than others. Information interpreted as a cost could invoke pain, anxiety, embarrassment, mental or physical effort, or something that could insight conflict if disclosed (Stafford, 2015). Information perceived as a reward would provide pleasure or increase closeness (Stafford, 2015). Positive experiences and feelings (e.g., sexual likes and satisfaction), viewed as a reward, tend to be disclosed more than negative experiences or feelings (e.g., faking an orgasm) as it represents the discloser more positively (La France, 2019; Taylor & Altman, 1975). Romantic couples in

Miller-Ott and Linder (2015) explained that by keeping conversations about sex positive, they felt more comfortable with their SSD. Byers and Demmons (1999) also reported that participants disclosed more about their sexual likes than dislikes, and they claimed that their partners did as well.

In addition, La France (2019) found that topics that could be hurtful or damaging to their partner's self-esteem, like faking an orgasm, were the least frequently discussed and even avoided altogether. Sexual history, performance issues, and dissatisfaction have also been cited as uncomfortable topics (Miller-Ott & Linder, 2013). When asked which taboo topics couples most avoided discussing, prior relationships, including past sexual experiences were cited twice as much as any other taboo topic (Anderson et al., 2011). These findings highlight how important the content of SSD can be in terms of maintaining and developing relationships. Romantic partners want to avoid hurting their partner and consequently their relationships with discussions of being dissatisfied or other negative issues. Thus, they avoid or change information they disclose to save their partner's face.

SPT assumes that people will seek to maximize the rewards and minimize the costs in their interactions with others, otherwise known as the mini-max principle (Mongeau & Miller-Henningsen, 2015). This indicates that before a disclosure of greater magnitude occurs, an individual will weigh the rewards of that relationship, such as time together, affection, and trust, against the costs of that relationship, such as frustrations and conflicts (Knobloch & Carpenter-Theune, 2004; Mongeau & Miller-Henningsen, 2015). As information becomes more personal and private, the cost of sharing that information rises (Ayres, 1979). When conversations about disclosing sex-related information are considered, romantic partners may choose to fully disclose, partially disclose, avoid the disclosure, or even alter details (Byers & Demmons, 1999).

However, as relationships progress in intimacy throughout the stages of SPT, private information that may have been costlier in earlier stages would be less of a risk as relationships become more established. For instance, a disclosure that could bring about conflict may be too risky when there is less certainty and trust in the relationship but "worth it" later in the relationship. With increasing feelings of trust and a greater ability to predict how the interaction partner will respond to the information as the relationship progresses, the cost of the information may decrease in relation to the reward (Mongeau & Miller-Henningsen, 2015). More disclosures occur when the discloser expects to be responded to positively and when feelings of uncertainty about the relationship are lower (Knobloch & Carpenter-Theune, 2004; Taylor & Altman, 1975). In part, this increase in feelings of trust as people move through the stages is due to the norm of reciprocity. When sharing something deeply personal about themselves, there is an expectation that information of the same deeply personal value will be shared by the other person in order to maintain or increase intimacy (Carpenter & Greene, 2016).

SSDs are more likely to occur when in an open, supportive, and already satisfying relationship context (Brown & Weigel, 2018). Additionally, trust is especially important for SSD in sexual relationships because of this potential for losing face and the inherent vulnerability the topic requires (Montesi et al., 2011). Conversely, depth and breadth of disclosure concerning sexual desires and attitudes will be inhibited in relationships viewed as non-supportive. Feeling safe and having positive expectations regarding the reaction to the disclosure is important (Brown & Weigel, 2018). The ability to openly communicate about nonsexual private information also contributes to more comfort with sex-related topics (Montesi et al., 2011). Sexual partners are also more likely to share their likes and dislikes and past sexual experience if

that disclosure if reciprocated by their partner, which aligns with the principle of mutual reciprocity (Byers & Demmons, 1999; Coffelt & Hess, 2014).

Because SSD is viewed as a taboo topic, people may provide a variety of reasons for avoiding the topic with their partner (Anderson et al., 2011). Increased feelings of social anxiety have been associated with less SSD and sexual satisfaction (Montesi et al., 2013). The fears of rejection that come with social anxiety may be perceived as a cost that outweighs the benefits of disclosing information about sexual likes and desires (Montesi et al., 2013). Too much disclosure with negative affect could feel like criticism for the other partner and lead to less SSD. La France (2019) found that positive SSD, such as preferred sexual activities, satisfaction, and birth control were more frequently discussed than negative SSD, including rape, distressing sex, negative feelings about sex, and pretending to enjoy sex. This implies the importance of the valence and content of SSD. This also signals that people are generally conscious of how their partner may respond to their SSD, particularly in the affective and stable stages of SPT, leading to more positive disclosures about sex overall.

Benefits of Sexual Self-Disclosure

Increased positive SSD is linked to greater feelings of relationship and sexual satisfaction (Brown & Weigel, 2018; Mark & Jozkowski, 2013; Montesi et al., 2011; Rehman et al., 2011). The assumptions of SPT would suggest that positive mutual self-disclosure about sex-related topics would result in greater intimacy, and thus, more satisfaction in the sexual relationship. In particular, open communication about positive sex-related topics (e.g., sexual preferences and desires) can lead to direct changes and improvements in a couples' sex life, which is linked to satisfaction (Byers & Demmons, 1999; Mark & Jozkowski, 2013). A general knowledge about sex, their own sexual preferences, and their partners sexual preferences are positively related to

willingness to communicate about sex-related topics as well as sexual satisfaction (La France, 2010). When an individual shares their sexual preferences or personal desires, their partner will have a better understanding of what would please them.

When romantic partners reported increased depth and breadth when discussing positive sexual topics, they also reported increased relational affiliation and commitment (Coffelt & Hess, 2014). Additionally, women who reported higher relationship quality were more likely to report greater comfort when communicating about sex with their partners (Lander & Ramseyer Winter, 2019). It appears that sexual disclosures and satisfaction could have a bi-directional connection in which more positive sexual disclosures lead to increased satisfaction, which encourages more communication about sex in the relationship (Mark & Jozkowski, 2013). Importantly, Coffelt and Hess (2014) found that not all sex-related topics are created equal when it comes to increasing satisfaction. Disclosures about positive affect, sexual likes, and sexual history were linked to increased relationship satisfaction while topics with negative affect were negatively associated with relationship satisfaction.

Satisfaction in sexual relationships is not the only reward of SSD. Communication about sexual history, health, and preferences has many beneficial outcomes for the individual and relationship. Greater comfort and willingness to disclose about sex-related topics has been linked to safer sex practices, such as a greater likelihood of using a condom every time and limiting sexual partners (Ramseyer Winter et al., 2018). Landor and Ramseyer Winter (2019) found that women who felt more comfortable communicating about sex-related topics with their partners were also more likely to take precautions to prevent unplanned pregnancy, such as condoms and other forms of birth control. Communication about past sexual experiences is also important for new sexual relationships because it can lead to crucial conversations about sexual history and

STI-related information (Anderson et al., 2011). However, all of these benefits, while important, will not be the focus of this dissertation.

Risks of Sexual Self-Disclosure

While SSD has many relational and personal benefits, sharing sex-related information is a high face threatening risk that can prompt feelings of discomfort, humiliation, rejection, anxiety, embarrassment, and vulnerability (Coffelt & Hess, 2014; Lucchetti, 1999; Montesi et al., 2011). Individuals assess risks based on threats to their self-image and their relationship (Knobloch & Carpenter-Theune, 2004). Concerns over what impression will be made following self-disclosure about sex-related topics can result in discomfort with the topic, even in close relationships. Moreover, apprehension is often associated with SSD because of the potential for a negative impact on the relationship, loss of respect, rejection, and wanting to avoid hurting their partner (La France, 2019; Lucchetti, 1999). For example, a person who wants to present a responsible image would risk losing face if they disclosed to their partner that they did not use condoms every time they had sex before their relationship and contracted an STI.

Because of this risk to face, sexual partners experience the dialectical tension of needing to self-disclose and needing to conceal sex-related information, like sexual history, for the sake of sexual health (Lucchetti, 1999). This tension may lead a partner to avoid or alter the details of their sexual history to save face (Lucchetti, 1999). Concern for the partner's face is also evident when examining SSD. For example, participants explained that thinking about their partner's positive face when discussing sex, especially in terms of sexual performance issues and sexual history, was important (Miller-Ott & Linder, 2015). La France (2019) reported that preferences regarding anal sex, frequency of sex, and sexual activity with other people were the largest sources of relational conflict.

In review, SPT assumes that relationships increase in intimacy over time through depth and breadth of mutual self-disclosure. This dissertation argues that greater depth and breadth of positive SSD would also correlate with increased intimacy and, thus, more relationship and sexual satisfaction. The minimax principle claims that people will choose to minimize costs (risks) and maximize rewards (benefits), so this dissertation also hypothesizes that perceptions of risks and benefits in relation to disclosing about sex-related topics would be correlated with depth and breadth of disclosure.

Family Communication Patterns Theory

While there are many perceived risks and benefits associated with decisions about depth and breadth of SSD, the patterns of communication that occur in a person's family of origin could also impact disclosure. This dissertation examines how family communication patterns could influence SSD in future romantic relationships. FCPT is one of the most influential family communication theories as it can be applied to almost all family communication behaviors and interactions (Hesse et al., 2017; Keating, 2016; Koerner & Schrodt, 2014). FCPT focuses specifically on parent-child communication concerning the establishment of a shared reality and how that communication impacts information processing and psychosocial and behavioral outcomes (Koerner et al., 2018). This theory explains the process of co-orientation in families to create shared worldviews, values, and belief systems through family communication patterns (Horstman et al., 2018). Family communication patterns are argued to be "integral to how families understand their familial relationships, develop behavioral expectations, and interpret and evaluate their own behavior and that of other family members" (Koerner et al., 2018, p. 144). Thus, a family's behavior and patterns for communication create a social reality through which they make sense of the world (Fowler et al., 2010; Koerner & Fitzpatrick, 2002).

Conversation and Conformity Orientation

There are two recognized dimensions of family's habitual ways of communicating, including conversation orientation (CVO) and conformity orientation (CFO), that are employed in all types of family communication and are central to family functioning (Koerner et al., 2018; Koerner & Fitzpatrick, 2002). CVO is the dimension of family communication that concerns the degree to which families encourage all family members to participate in discussions on a wide variety of topics without restraint (Koerner & Fitzpatrick, 2002). CFO is the second dimension of family communication and concerns the degree to which a climate of homogeneity of attitudes, values, and beliefs are encouraged (Koerner & Fitzpatrick, 2002). These different dimensions of family communication largely influence the depth and breadth of topics discussed in the family as well as how decisions are made (Keating, 2016; Koerner & Fitzpatrick, 2002; Koesten, 2004).

CVO and CFO are distinct dimensions of family communication, but they are not wholly independent of each other (Keating, 2016; Koerner & Fitzpatrick, 2002; Koerner & Schrodt, 2014). Keating (2016) conducted a meta-analysis to determine the relationship between the family communication orientations. It was found that there is an inverse conversation-conformity relationship. This finding suggests that families will tend to be greater in CVO (pluralistic type) or CFO (protective type) than the other dimension. Although some families certainly report an equally greater (consensual type) or lesser (laissez-faire type) level of both orientations simultaneously, it is more frequent that families would exhibit this inverse relationship (Keating, 2016; Koerner & Fitzpatrick, 2002; Koerner & Schrodt, 2014; Koesten, 2004). For simplicity in this dissertation, "greater" and "lesser" will be used to indicate which dimension was more dominate for the family. For instance, "greater CVO" will indicate that individuals reporting more CVO characteristics are higher or lower on another variable while "lesser CVO" will

indicate the opposite. Because these are two separate dimensions, associations with each dimension will be reported separately, and the interaction of both will be discussed only in studies that performed moderation analysis or used the four-factor typology.

Families who report greater CVO make decisions together, discuss a multitude of topics openly, and share their private thoughts and feelings (Koerner et al., 2018). Their communication is generally unrestrained and frequent. Greater CVO families hold the belief that exchanging ideas, opinions, and values is essential to family life (Koerner & Fitzpatrick, 2002; Koerner & Schrodt, 2014). Interactions are frequent and spontaneous between family members to maintain an enjoyable family environment (Koerner & Fitzpatrick, 2002). Additionally, family plans and activities are discussed with all family members, leading to family decisions being made together.

Families who report greater CFO value the uniformity of beliefs and attitudes and are characterized by conflict avoidance and the interdependence of family members (Koerner & Fitzpatrick, 2002; Koerner et al., 2018). Past research has indicated that the balance of power in these families follows the traditional family structure and is hierarchical, stressing the obedience to parents and other adults (Koerner & Fitzpatrick, 2002). Thus, parents are framed as the decision-makers while children are expected to behave according to those expectations. However, recent research using FCPT has expressed the need for a re-operationalization of the conformity orientation scale because of its inconsistency and outdated cultural norms (Hesse et al., 2017; Horstman et al., 2018; Koerner & Schrodt, 2014; Koerner et al., 2018).

CFO was operationalized as less discussion, full parental authority, and avoidance of conflict, which represented CFO with negative connotations (e.g., overbearing, stifling, dogmatic) and impacted how the construct has been characterized (Hesse et al., 2017). Schrodt

and Koerner (2014) also highlighted that the inverse relationship commonly found between CVO and CFO is likely because of the CFO scale's items focusing on conflict-avoidance, which is essentially the opposite of the open communication that CVO represents. However, CFO is not inherently negative and should not be conceptualized as such. Families with greater CFO are highly family oriented. In response to this irregularity, Horstman et al (2018) developed the Expanded Conformity Orientation Scale (ECOS), which is used in this study, to better represent the family interactions that focus on creating a homogenous shared reality without framing CFO as oppressive and negative. Thus, as more scholars utilize the ECOS in their research with FCPT, a clearer and more representative picture of CFO will be established.

Due to the perception that there are more benefits of disclosure in greater CVO families than risks because exchanging ideas, opinions, and values are encouraged and accepted, more depth and breadth of disclosure may occur. However, the inconsistency in how CFO is represented makes it difficult to determine how the characteristics of this dimension of family communication might impact disclosure in future romantic or sexual relationships. The perception of power hierarchy in parent-child relationships and the method of decision-making in the families with greater CFO qualities could contribute to less depth and breadth of disclosure. Similarly, the desire to avoid conflict or frustrating conversations might also negatively impact depth and breadth of disclosure for greater CFO families. In fact, it is possible that families with greater CFO qualities might emphasize that their family value is to communicate openly about sex. Clearly, CFO needs to be further investigated so that researchers are able to better understand this family communication pattern.

Outcomes of Family Orientation and Future Relationships

Now that the two dimensions of family communication patterns have been explored, it is important to examine research that illustrates the impact that family communication can have on future relationships outside of the family of origin. For instance, family communication patterns have been found to influence disclosure and the willingness to communicate (Avtgis, 1999; Schrodt & Phillips, 2016), relational maintenance behaviors (Fowler et al., 2010; Koerner & Cvancara, 2002; Ledbetter, 2009), well-being and self-esteem (Huang, 1999), and communication competence (Koesten, 2004) in future adult relationships. Individuals from greater CVO families were more likely to seek out others for opinions or conversation than individuals from greater CFO families (Avtgis, 1999).

In a study by Schrodt and Phillips (2016), family communication patterns were examined in relation to self-disclosure and relationship satisfaction in sibling relationships. Siblings from families with greater CVO reported more depth and breadth in self-disclosure as well as higher relationship satisfaction. This finding is significant to consider in terms of sexual relationships as well because it illustrates how open communication between parents and children can influence communication behaviors with others outside of that dyad.

Families even differ in the ways they engage in maintenance behaviors with others outside of the family. For instance, for adults in romantic relationships, a positive relationship has been found between CVO and relational maintenance behaviors, including assurances, openness, conflict management, shared tasks, positivity, and social networks (Fowler et al., 2010). Consistent with FCPT, CFO was negatively related to conflict management as conflict avoidance is typical for families scoring greater in this dimension than CVO. Families with greater CFO are also more likely to give advice and less likely to agree or disagree with others

(Koerner & Cvancara, 2002). This finding also points to the tendency of greater CFO families to avoid conflict and emphasize the homogeneity of values.

The dimensions of family communication have been found to influence self-esteem and sociability. More positive self-views, a greater likelihood to discuss personal information with friends, and be more sociable outside of the family was related to families with greater CVO (Huang, 1999). In comparison, greater CFO individuals were shy, monitored their self-presentations more, and had lower self-esteem. In friendships and romantic relationships, individuals from families with greater CVO reported greater communication competence, but this finding was dependent on the gender of the individual (Koesten, 2004). For instance, women were more likely to offer emotional support to friends and romantic partners if they reported greater CVO whereas men reported more self-disclosure and conflict management in romantic relationships than women.

Family Communication Influence on Sex Communication

Family communication patterns could have an association with decisions to disclose sex-related information in romantic relationships as well. Greater CVO individuals were positively related to the perception of communication rewards while greater CFO individuals were negatively related with perceptions of rewards (Avtgis, 1999). Furthermore, greater CVO was associated with less topic avoidance. This could mean that greater CVO individuals may be more likely to perceive rewards related to SSDs and less likely to avoid those conversations. Additionally, with open communication also contributing to greater depth and breadth of nonsexual and sexual topics, greater CVO individuals may disclose more sex-related information. These findings could indicate a mediating role for the perception of benefits and risk between family communication patterns and the decision to disclose.

Research directly related to how family communication patterns is associated with communication in future relationships outside of the family is limited. However, there is a connection between the quality of family relationships with the quality of adult romantic relationships, particularly through the use of conflict tactics (Crockett & Randall, 2006). Greater discussion and better conflict tactics (e.g., where views of both partners are acknowledged) actually mediated the association between family of origin relationships and future romantic relationships. This is significant because of the tendency for greater CFO individuals to avoid conflict and promote a homogeneity of ideas. Koerner and Fitzpatrick (2002) explained that the ways in which people approach conflict in their romantic relationships stems from their family of origin. Additionally, an individual's willingness to discuss sex-related topics with a romantic partner has been linked to openness in family relationships, which is a characteristic of greater CVO families (Snell et al., 1989). Conflict will not specifically be measured in this study but is considered as a potential risk of SSD that could influence an individual's decision to disclose.

Influence of Gender on Disclosure

Literature regarding gender differences in SSD shows inconsistent results with some finding differences and others none at all. Women have been found to self-disclosure more than men for both sexual and nonsexual topics, but the difference is small (Byers & Demmons, 1999; Coffelt & Hess, 2014; Green & Faulkner, 2005). Men and women did not differ in variety of sex-related topics discussed (Byers & Demmons, 1999; La France, 2019). Additionally, Anderson et al. (2011) observed that there was no statistically significant difference between men and women when asked about why they chose to avoid discussions of past sexual experiences. Men and women also did not to appear to differ in their feelings of discomfort and difficulty when disclosing about sexual preferences (Byers & Demmons, 1999).

In the context of sexual and romantic relationships some differences have emerged. Men have reported more general knowledge and knowledge about their own sexual preferences and desires while women have more knowledge about their partner's preferences and desires (La France, 2010). Men experience more overall relationship satisfaction from more open sex communication than women (Montesi et al., 2011). Women have been found to be more willing to discuss private sex-related information, such as sexual sensations and fantasies, with their romantic partner than men while men were more likely to discuss the meaning of sex, sexual accountability, and sexual delay (Snell et al., 1989). Men also expressed a higher ability to self-disclose about general communication topics and manage conflict with romantic partners while women were more able to self-disclose with same-sex friends (Koesten, 2004).

Snell et al. (1989) hypothesized that many gender differences in SSD may be attributed to power differentials between men and women. Traditionally, men have been expected to be knowledgeable, assertive, initiators of sexual activity in any type of relationship whereas women should be passive, compliant, responsive, and pleased with a sexual encounter, but only in committed relationships (Green & Faulkner, 2005). According to Metts and Cupach (2015), feelings of envy, embarrassment, jealousy, pride, and shame are socially constructed and imposed upon men and women from a young age. However, the attitudes surrounding the traditional sexual double standard have been shifting among younger generations (Green & Faulkner, 2005). Romantic couples who had less traditional values reported more mutual SSD, particularly about sexual issues, for both partners as well as high relationship efficacy (Green & Faulkner, 2005; Horne & Johnson, 2018). This change in attitude is noteworthy because it could also represent a future change in individuals' willingness to self-disclose sex-related information in sexual relationships.

Research Questions and Hypotheses

RQ1a: What is the depth (i.e., average amount) of SSD topics reported by individuals in sexual relationships?

RQ1b: What is the breadth (i.e., total) of SSD topics reported by individuals in sexual relationships?

H1a: Individuals who reported SSD topics as more beneficial/less risky will be associated with more depth of SSD with their sexual partner.

H1b: Individuals who reported SSD topics as more beneficial/less risky will be associated with more breadth of SSD with their sexual partner.

H2a: CVO will be positively related to depth of SSD in sexual relationships.

H2b: CVO will be positively related to breadth of SSD in sexual relationships.

RQ2a: Will CFO be negatively related to depth of SSD in sexual relationships?

RQ2b: Will CFO be negatively related to breadth of SSD in sexual relationships?

H3: CVO will be associated with the perception of SSD as more beneficial/less risky by individuals in sexual relationships.

RQ3: Will CFO be associated with the perception of SSD as more risky/less beneficial by individuals in sexual relationships?

H4a: Perceptions of risk/benefit by individuals in sexual relationships mediates the relationship between CVO and depth of SSD.

H4b: Perceptions of risk/benefit by individuals in sexual relationships mediates the relationship between CVO and breadth of SSD.

RQ4a: Will perceptions of risk/benefit by individuals in sexual relationships mediate the relationship between CFO and depth of SSD?

RQ4b: Will perceptions of risk/benefit by individuals in sexual relationships mediate the relationship between CFO and breadth of SSD?

H5a: Depth of SSD by individuals in sexual relationships will mediate the relationship between CVO and relationship satisfaction.

H5b: Depth of SSD by individuals in sexual relationships will mediate the relationship between CVO and sexual satisfaction.

H5c: Breadth of SSD by individuals in sexual relationships will mediate the relationship between CVO and relationship satisfaction.

H5d: Breadth of SSD by individuals in sexual relationships will mediate the relationship between CVO and sexual satisfaction.

RQ5a: Will depth of SSD by individuals in sexual relationships mediate the relationship between CFO and relationship satisfaction?

RQ5b: Will depth of SSD by individuals in sexual relationships mediate the relationship between CFO and sexual satisfaction?

RQ5c: Will breadth of SSD by individuals in sexual relationships mediate the relationship between CFO and relationship satisfaction?

RQ5d: Will breadth of SSD by individuals in sexual relationships mediate the relationship between CFO and sexual satisfaction?

RQ6a: Will the interaction between CVO and CFO individuals predict depth of SSD in sexual relationships?

RQ6b: Will the interaction between CVO and CFO individuals predict breadth of SSD in sexual relationships?

H6a: The relationship between CVO and relationship satisfaction will be serially mediated through (a) perceptions of risk/benefit and (b) depth of SSD in sexual relationships.

H6b: The relationship between CVO and relationship satisfaction will be serially mediated though (a) perceptions of risk/benefit and (b) breadth of SSD in sexual relationships.

H6c: The relationship between CVO and sexual satisfaction will be serially mediated through (a) perceptions of risk/benefit and (b) depth of SSD in sexual relationships.

H6d: The relationship between CVO and sexual satisfaction will be serially mediated though (a) perceptions of risk/benefit and (b) breadth of SSD in sexual relationships.

RQ7a: Will the relationship between CFO and relationship satisfaction will be serially mediated through (a) perceptions of risk/benefit and (b) depth of SSD in sexual relationships?

RQ7b: Will the relationship between CFO and relationship satisfaction will be serially mediated though (a) perceptions of risk/benefit and (b) breadth of SSD in sexual relationships?

RQ7c: Will the relationship between CFO and sexual satisfaction will be serially mediated through (a) perceptions of risk/benefit and (b) depth of SSD in sexual relationships?

RQ7d: Will the relationship between CFO and sexual satisfaction will be serially mediated though (a) perceptions of risk/benefit and (b) breadth of SSD in sexual relationships?

RQ8a: What differences in the depth of SSD topics in sexual relationships will be reported between men and women?

RQ8b: What differences in the breadth of SSD topics in sexual relationships will be reported between men and women?

RQ8c: What differences in the perception of risk/benefit of SSD topics in sexual relationships will be reported between men and women?

RQ9a: Will the relationship between relationship satisfaction and depth of SSD in sexual relationships be different for men and women?

RQ9b: Will the relationship between relationship satisfaction and breadth of SSD in sexual relationships be different for men and women?

RQ9c: Will the relationship between sexual satisfaction and depth of SSD in sexual relationships be different for men and women?

RQ9d: Will the relationship between sexual satisfaction and breadth of SSD in sexual relationships be different for men and women?

Chapter 3: Methodology

Participants

Participants were recruited using a communication studies department's undergraduate research website on two separate occasions, once in the spring 2021 semester and once in the fall 2021 semester. Undergraduate students from participating communication studies courses had access to this website. Participants who completed the survey received five extra credit points as an incentive for participation. To meet the qualification criteria for this study, participants needed to 1) be 18 to 25 years old and 2) have a current or past sexual relationship within the last 12 months.

A sample of 330 participants (n = 139 male; n = 186 female; n = 4 non-binary; n = 1 preferred not to say) aged 18 to 25 years old (M = 19.86, SD = 1.50) were recruited from a Midwestern university. In a "Select All" question, 81.2% reported being Caucasian (n = 268) while 7.6% were Black/African American (n = 25); 5.8% were Asian (n = 19), 3.6% were Hispanic/Latinx (n = 12); 1.8% were Native American/Pacific Islander (n = 6); and 0.6% were American Indian/Alaska Native (n = 2). When asked about religiosity, 66.7% of participants reported being not religious (n = 104) or slightly religious (n = 116) while 29.1% were moderately religious (n = 96) and 4.2% were very religious (n = 14). All participants had a sexual relationship within the past 12 months. For the purposes of this study, a sexual relationship is defined as a relationship in which oral sex, vaginal sex, anal sex, or mutual masturbation has occurred (see below for confirmation checks). The majority of participants reported having 1 (n = 173, 52.4%), 2 (n = 77, 23.3%), or 3 (n = 36, 10.9%) sexual partners in the past 12 months while other participants reported 4 (n = 15, 4.5%), 5 to 6 (n = 17, 5.2%), 7 to 9 (n = 4, 1.2%), 10 to 19 (n = 4, 1.2%), and 20 or more (n = 4, 1.2%).

All participants reported being either currently in (*n* = 198, 60%) or having had a recent sexual relationship within the last 12 months (*n* = 132, 40%) where sex-related communication would occur (i.e., one-night stand (*n* = 8, 2.4%), hook-up partner (*n* = 66, 20%), dating non-exclusively (*n* = 23, 7%), dating exclusively (*n* = 229, 69.4%), or engaged (*n* = 4, 1.2%)). No participants reported being married. Participants reported their sexual partners to be 56.7 % male (*n* = 187) and 42.4 % female (*n* = 140) with 3 participants preferring not to say. Sexual relationships ranged from 0 to 99 months (*M* = 15.77, *SD* = 16.09).

After cleaning the data, there were a total of 330 participants used for analysis. However, 449 participants began the survey, but 67 responses were removed for non-completion. This means that they either exited the survey without finishing or were kicked out early for incorrectly answering one of the attention check or qualifying questions. For instance, if they answer "no" to the question asking if they were currently or had been in a sexual relationship in the last 12 months, they would have not been allowed to continue the survey. There were 14 participants removed for answering questions too quickly (i.e., finding the average time and removing responses two standard deviations above and below the mean), indicating that they were not reading the questions. There were four participants removed for evidence of bot activity based on Qualtrics's ReCAPTCHA score, which indicates that a score less than .50 implies the participant was not likely human. Upon further inspection, these participants responded to items with patterned selections (e.g., 1, 2, 3, 1, 2, 3, …) or exhibited the other inconsistencies below that would illustrate the participant did not read the questions. Twenty-one participants were removed for choosing the same number consecutively for every item (e.g., selecting "1" throughout the survey) (i.e., straight-lining). There were nine participants removed for being outside of the emerging adulthood age range of 18 to 25 (i.e., 38 years of age). Finally, four participants were

removed for inconsistent responses to oppositely worded items (e.g., selecting "5" on "I am expected to challenge my parents' beliefs." and "I am expected to adopt my parents' beliefs.").

Procedure

After receiving IRB approval, an invitation was sent via email to students who were enrolled in an undergraduate research website where students could select between several study options for extra credit. Individuals who met the criteria were able to select a link that redirected them to a survey on Qualtrics. Participants were prompted to read and electronically consent to an information statement about the contents of the survey (see Appendix A). Then, participants were asked demographic and background questions about their sexual relationship and partner (e.g., relationship status, time in relationship, etc.) (see Appendix B for survey sample). The demographic and background questions also had attention checks and qualification questions that ensured that participants met the criteria of the study and were reading the directions. For example, one question asked participants if they had engaged in sexual activity in the last 12 months, which was a required criteria for participation. If participants responded with "no," they were notified that they did not meet the study criteria and thanked for their interest. The survey took approximately 15 minutes to complete.

Participants were asked to consider their communication with their most recent sexual partner (i.e., current or previous) and indicate the extent to which they had discussed a series of sex-related topics (e.g., past sexual behaviors, sexual preferences, fantasies, etc.) as well as their perception of risk and benefit associated with each topic. Questions regarding relationship and sexual satisfaction were also asked. Then, participants were instructed to consider communication with their parents as adolescents (i.e., middle school and high school) as they respond to items related to family communication patterns. This ensured that all participants

were considering family communication at a similar stage in life when family interactions and communication was most frequent. Finally, participants were thanked for their participation and asked to complete a separate online form with their name, email address, and their instructor's name to receive five points of extra credit. The names and email addresses of participants were shared only for the purpose of receiving extra credit in their communication studies courses. Personal information was not shared with any other entity.

Measurements

Family Communication Patterns. CVO was measured using a 15-item subscale from Ritchie and Fitzpatrick's (1990) Revised Family Communication Patterns Instrument (RFCP) (see Appendix C for all study measures). The CVO subscale demonstrated high reliability (α = .91) and assessed the degree to which families encourage all family members to participate in discussions on a wide variety of topics without restraint (e.g., "My parents often asked my opinion when the family was talking about something." (*M* = 3.59, *SD* = 1.14)).

CFO was measured using Horstman et al.'s (2018) 24-item Expanded Conformity Orientation Scale (ECOS), which was revised to represent a more contemporary version of communication in modern families. The ECOS demonstrated high reliability (α = .91) and assessed the degree to which a climate of homogeneity of attitudes, values, and beliefs are encouraged and is divided into 4 dimensions: respecting parental authority (e.g., "In our home, I was expected to speak respectfully to my parents" (*M* = 4.52, *SD* = .79)), experiencing parental control (e.g., "My parents tried to persuade me to view things the way they saw them" (*M* = 3.31, *SD* = 1.23)), adopting parents' values/beliefs (e.g., "My parents encouraged me to adopt their values" (*M* = 3.59, *SD* = 1.06)), and questioning parents' authority/beliefs (e.g., "I was expected to challenge my parents' beliefs" (*M* = 3.48, *SD* = 1.08)). The dimension for questioning parents'

authority/beliefs is reverse coded and represents how little parents encourage their children to challenge their beliefs.

All items for CVO and CFO were measured on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). Responses were averaged for the CVO subscale and the ECOS, with higher values indicating a higher score on either CVO or CFO.

Sexual Self-Disclosure. A scale measuring the depth and breadth of disclosure regarding various sex-related topics was created for this study. The 29 items were generated by drawing items from relevant literature (e.g., Brown & Weigel, 2018; La France, 2019; Snell et al., 1989). Sex-related topics include preferences about vaginal sex, sexual health history, masturbation, personal views on sexual morality, etc. (see instrument- Appendix C). This scale demonstrated high reliability ($\alpha = .96$) and was used to assess the overall depth and breadth of SSD reported by participants in their sexual relationships. Participants were asked to indicate the degree to which the topic had been discussed using a 5-point Likert scale (0 = *have not discussed*; 4 = *have fully discussed*), with higher averaged scores indicating greater depth of topics discussed with a sexual partner. The topics scored "1" or higher, indicating that the topic had been discussed in the sexual relationship, were summed to determine the breadth of topics. Breadth scores ranged from 0 (having not discussed any sex-related topics) to 29 (having discussed all sex-related topics).

Risk/Benefit. A scale measuring the degree to which the various sex-related topics identified by the SSD scale are perceived as risky versus beneficial was created for this study. The 29 items mirror the items from the SSD scale and demonstrated high reliability ($\alpha = .94$). After identifying their level of disclosure for each sex-related topic, participants were asked to indicate the degree to which the topic is perceived as risky and/or beneficial using a 5-point Likert scale (1 = *risky*, 2 = *more risky than beneficial*, 3 = *equally risky and beneficial*, 4 = *more*

beneficial than risky, 5 = *beneficial)*, with higher scores indicated less perceived risk and more perceived benefits.

Sexual Satisfaction. La France's (2010) self-report sexual satisfaction 5-item measure demonstrated high reliability (α = .86) and was used to assess the degree to which an individual is satisfied with their sexual experience with their sexual partner (e.g., "My partner makes me feel sexually attractive" (*M* = 4.46, *SD* = .87)). All items were measured using a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*), with higher averaged scores indicating greater sexual satisfaction.

Relationship Satisfaction. Urbano-Contreras' et al. (2017) 10-item self-report Satisfaction with Couple Relationship Scale (SCR) demonstrated high reliability (α = .95) and was used to assess the degree to which individuals are satisfied with their relationship with their sexual partner (e.g., "I feel understood by my partner" (*M* = 3.90, *SD* = 1.25)). The SCR has demonstrated high internal consistency reliability and concurrent validity (Urbano-Contreras et al., 2017). All items were measured using a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*), with higher averaged scores indicating greater relationship satisfaction.

Chapter 4: Data Analysis

Preliminary Analysis

To analyze the data set, IBM SPSS Statistics and Hayes' (2018) PROCESS macro were used. The alpha risk level was set at .01 to reduce the likelihood of Type 1 error. Table 1 reports the relationships between depth and breadth of SSD, perceptions of risks and benefits, family communication patterns, satisfaction, time in the relationship, and relationship type. Depth (M = 2.41, SD = .99) and breadth (M = 24.31, SD = 6.23) of SSD were strongly correlated, $r(330)$ = .83, $p < .01$, indicating that as participants disclosed about more topics with their sexual partner, they also disclosed more in-depth about those topics. As expected, relationship satisfaction (M = 4.09, SD = .98) and sexual (M = 4.25, SD = .82) satisfaction illustrated a strong correlation, $r(330) = .59$, $p < .01$. Time in the relationship (M = 15.77, SD = 16.09) was weakly to moderately correlated with all of the variables except CFO (see Table 2). CVO (M = 3.58, SD = .83) and CFO (M = 3.70, SD = .62), displayed a strong negative correlation, $r(330) = -.47$, $p < .01$. This indicates that as participants report having greater CVO qualities in their family communication, they also report having less CFO qualities and vice versa. While CVO was significantly correlated to every tested variable, CFO was not found to be significantly correlated to any other variable.

Primary Analysis

For RQ1a (*What is the depth (i.e., average amount) of SSD topics reported by individuals in sexual relationships?*) and RQ1b (*What is the breadth (i.e., total) of SSD topics reported by individuals in sexual relationships?*), descriptive statistics were analyzed to report the overall depth and breadth of SSD and the individual depth and breadth for each SSD topic. Overall, participants reported average depth (M = 2.41, SD = .99) and high breadth (M = 24.31, SD =

6.23) of SSD in relationships. Feelings about using condoms were reported with the highest depth (M = 3.26, SD = 1.09) and breadth (97.00% of participants) while faking an orgasm had the lowest depth (M = 1.53, SD = 1.55) and breadth (57.90% of participants) reported among participants. Table 2 shows the totals for breadth and means and standard deviations for depth and perceptions of risk/benefit of the 29 SSD topics.

For H1a (*Individuals who reported more SSD topics as more beneficial/less risky will be associated with more depth of SSD with their sexual partner.*) and H1b (*Individuals who reported more SSD topics as more beneficial/less risky will be associated with more breadth of SSD with their sexual partner.*), a correlation analysis was used. There was a strong positive correlation between the overall depth of SSD and the average perception of risk/benefit, $r(330) = .58$, $p < .01$. This suggests that as participants report more depth in disclosure about sex-related topics, they also perceive less risk and greater benefit to disclosing about those topics. H1a was supported. There was a moderate positive correlation between total breadth of SSD topics and the average perception of risk/benefit, $r(330) = .40$, $p < .01$. This indicates that as participants disclose about a greater number of sex-related topics, they also perceived less risk and more benefit to disclosing about those topics. H1b was supported.

A multiple linear regression analysis was performed to test H2a (*CVO will be positively related to depth of SSD in sexual relationships.*), H2b (*CVO will be positively related to breadth of SSD in sexual relationships.*), RQ2a (*Will CFO be negatively related to depth of SSD in sexual relationships?*), and RQ2b (*Will CFO be negatively related to breadth of SSD in sexual relationships?*). For depth, the overall model of CVO and CFO as predictors for depth of SSD was significant, $F(2, 327) = 12.80$, $p < .01$, $R^2 = .07$, indicating that depth was influenced by CVO and CFO. Both CVO, $b = .37$, $t(327) = 5.06$, $p < .01$, and CFO, $b = .25$, $t(327) = 2.57$, $p <$

.01, were significant predictors of depth individually. This suggests that CVO and CFO both have an association with the depth of SSD in sexual relationships. H2a was supported. For breadth, the overall model of CVO and CFO as predictors for breadth was significant, $F(2, 327) = 5.12$, $p < .01$, $R^2 = .03$ indicating that breadth was also associated with CVO and CFO. However, only CVO, $b = 1.50$, $t(327) = 3.22$, $p < .01$, was a significant predictor of breadth while CFO, $b = .92$, $t(327) = 1.49$, $p = .14$, was not, suggesting that breadth of SSD is associated with greater CVO, but not CFO. H2b was supported.

For H3 (*CVO will be associated with the perception of SSD as more beneficial/less risky by individuals in sexual relationships.*) and RQ3 (*Will CFO be associated with the perception of SSD as more risky/less beneficial by individuals in sexual relationships?*), a simple linear regression analysis was used. The model was non-significant, $F(1, 328) = 4.10$, $p = .04$. H3 was not supported. For RQ3, a simple linear regression analysis was also used to test the association between CFO and the perception of SSD as being more risky and less beneficial. The finding was non-significant, $F(1, 328) = .00$, $p = .96$. This indicates that CVO and CFO did not have an impact on how participants perceived risks and benefits of disclosing about sex-related topics when communicating with their sexual partners. Table 3 shows correlations for CVO and CFO with individual SSD topics.

Mediation Analyses

Using Hayes' (2018) PROCESS macro in SPSS, a simple mediation analysis using Model 4 for one mediator, 5,000 bias-corrected bootstraps, and a 95% confidence interval was used to test H4a-b, H5a-d, RQ4a-b, and RQ5a-d. The models were tested with time in the relationship and relationship type as covariates due to their significant correlations with depth and breadth of SSD. Time in the relationship is important to be controlled for to identify the

impact that simply having more time to disclose about sex-related topics could have. Additionally, relationship type should be controlled for because of the differing levels of commitment between the types (e.g., hookup versus exclusively dating) and the impact that could have on not only disclosure but relationship and sexual satisfaction as well. The results of those analyses will be introduced below and further illustrated in the subsequent tables.

The mediation models for H4a (*Perceptions of risk/benefit by individuals in sexual relationships mediates the relationship between CVO and depth of SSD.*) and H4b (*Perceptions of risk/benefit by individuals in sexual relationships mediates the relationship between CVO and breadth of SSD.*) were not supported (Tables 4 and 5). Thus, perceptions of risks and benefits did mediate the relationship between CVO and disclosure.

The mediation models for RQ4a (*Will perceptions of risk/benefit by individuals in sexual relationships mediate the relationship between CFO and depth of SSD?*) and RQ4b (*Will perceptions of risk/benefit by individuals in sexual relationships mediate the relationship between CFO and breadth of SSD?*) were not supported, indicating that perceptions of risks and benefits also did not mediate the relationship between CFO and disclosure (Tables 6 and 7).

The mediation models for H5a (*Depth of SSD by individuals in sexual relationships will mediate the relationship between CVO and relationship satisfaction.*), H5b (*Depth of SSD by individuals in sexual relationships will mediate the relationship between CVO and sexual satisfaction.*), and H5d (*Breadth of SSD by individuals in sexual relationships will mediate the relationship between CVO and sexual satisfaction.*) were supported while H5c (*Breadth of SSD by individuals in sexual relationships will mediate the relationship between CVO and relationship satisfaction.*) was not supported (Tables 8 to 11). H5a-b and H5d will be further discussed below.

As can be seen in Table 8, the relationship between CVO and relationship satisfaction was mediated by the depth of SSD. There was a direct association between CVO and relationship satisfaction, $F(3, 326) = 27.22$, $p < .01$, $R^2 = .20$, when also accounting for time in the relationship and relationship type as covariates. CVO also positively influenced depth of SSD, $F(3, 326) = 33.75$, $p < .01$, $R^2 = .24$. When both CVO and depth were taken into account with the two covariates, there was a significant influence on relationship satisfaction, $F(4, 325) = 28.23$, $p < 0.1$, $R^2 = .26$, indicating that as participants reported greater CVO and more depth of SSD, relationship satisfaction with sexual partners increased. A bootstrapped confidence interval for the indirect effect of CVO on relationship satisfaction through depth of SSD based on 5,000 bootstrap samples was found to be different from zero (.02 to .10), indicating that H5a was supported (Figure A).

Table 9 reports the mediation effect of depth of SSD on the relationship between CVO and sexual satisfaction with time in the relationship and relationship type as covariates. There was a correlation between CVO and sexual satisfaction, $F(3, 326) = 8.22$, $p < .01$, $R^2 = .07$, as well as between CVO and depth, $F(3, 326) = 33.75$, $p < .01$, $R^2 = .24$. Additionally, when both CVO and depth were taken into account, there was a significant influence on sexual satisfaction, $F(4, 325) = 14.82$, $p < .01$, $R^2 = .15$, indicating that sexual satisfaction increased as participants reported greater CVO and higher depth of SSD in their sexual relationships. A bootstrapped confidence interval for the indirect effect of CVO and sexual satisfaction through depth of SSD based on 5,000 bootstrap samples was found to be different from zero (.02 to .09), indicating that H5b was supported (Figure B).

Table 11 reports the mediation effect of breadth of SSD on the relationship between CVO and sexual satisfaction with time in the relationship and relationship type as covariates. As

above, there was a correlation between CVO and sexual satisfaction as well as between CVO and breadth, $F(3, 326) = 37.08$, $p < .01$, $R^2 = .25$. When taking both CVO and breadth into account with the two covariates, there was a significant influence on sexual satisfaction, $F(4, 325) = 8.96$, $p < .01$, $R^2 = .10$, indicating that sexual satisfaction increased as participants reported greater CVO and higher breadth of SSD in their sexual relationship. A bootstrapped confidence interval for the indirect effect of CVO and sexual satisfaction through depth of SSD based on 5,000 bootstrap samples was found to be different from zero (.00 to .04), indicating that H5d was supported (Figure C).

The mediation models for RQ5a (*Will depth of SSD by individuals in sexual relationships mediate the relationship between CFO and relationship satisfaction?*), RQ5b (*Will depth of SSD by individuals in sexual relationships mediate the relationship between CFO and sexual satisfaction?*), RQ5c (*Will breadth of SSD by individuals in sexual relationships mediate the relationship between CFO and relationship satisfaction?*), and RQ5d (*Will breadth of SSD by individuals in sexual relationships mediate the relationship between CFO and sexual satisfaction?*) were non-significant, indicating that disclosure did not mediate the relationship between CFO and satisfaction (Tables 12 to 15).

Moderation Analyses

Using PROCESS macro in SPSS, a moderation analysis using Model 1 for one moderator, 5,000 bias-corrected bootstraps, and a 95% confidence interval was used to test RQ6a-b and RQ9a-d (Hayes, 2018). The models were also tested with time in the relationship and relationship type as covariates due to their significant correlations with depth and breadth of SSD. The results of those analyses will be introduced below and further illustrated in the subsequent tables.

After mean centering the variables for interpretation, RQ6a (*Will the interaction between CVO and CFO individuals predict depth of SSD in sexual relationships?*) examined the overall interaction between CVO and CFO as predictors for depth with time in the relationship and relationship type as covariates, $F(5, 324) = 25.61$, $p < .01$, $R^2 = .28$, which was significant (Table 16). As individual predictors for depth, CVO, $b = .34$, $t(324) = 4.99$, $p < .01$, was significant while CFO, $b = .18$, $t(324) = 2.12$, $p = .04$, was not. Taken together, CVO and CFO, $b = -.34$, $t(324) = -3.83$, $p < .01$ significantly predicted depth. The conditional effect of CFO on depth of SSD with CVO illustrated when lower CFO was reported, $b = .54$, $t(324) = 5.62$, $p < .01$, there was a significant increase in depth. There was also an increase in depth when average CFO, $b = .35$, $t(324) = 5.09$, $p < .01$ was reported but not for greater CFO, $b = .12$, $t(324) = 1.59$, $p = .11$. This indicates that when CFO interacts with CVO to predict depth of SSD, participants who reported less or average CFO were more likely to experience more depth of SSD (Figure D).

RQ6b (*Will the interaction between CVO and CFO individuals predict breadth of SSD in sexual relationships?*) examined the interaction between CVO and CFO as predictors for breadth with time in the relationship and relationship type as covariates, $F(5, 324) = 23.99$, $p < .01$, $R^2 = .27$, which was significant (Table 17). As individual predictors for breadth, CVO, $b = 1.07$, $t(324) = 2.51$, $p < .01$, was significant but CFO, $b = .56$, t(324) = 1.03, $p = .30$, was not significant. Taken together, CVO and CFO did not significantly predict breadth, $b = -1.30$, $t(324) = -2.33$, $p = .02$. This indicates that the interaction between CVO and CFO does not predict breadth of SSD.

Serial Mediation Analyses

Using Hayes' (2018) PROCESS macro in SPSS, a serial mediation analysis using Model 6 for two mediators, 5,000 bias-corrected bootstraps, and a 95% confidence interval was used to

test H6a-d and RQ7a-d. The models were tested with relationship length and relationship type as covariates. The results of those analyses will be introduced below and further illustrated in the subsequent tables.

The serial mediation models for H6a (*The relationship between CVO and relationship satisfaction will be serially mediated through (a) perceptions of risk/benefit and (b) depth of SSD in sexual relationships.*), H6b (*The relationship between CVO and relationship satisfaction will be serially mediated though (a) perceptions of risk/benefit and (b) breadth of SSD in sexual relationships.*), H6c (*The relationship between CVO and sexual satisfaction will be serially mediated through (a) perceptions of risk/benefit and (b) depth of SSD in sexual relationships.*), and H6d (*The relationship between CVO and sexual satisfaction will be serially mediated though (a) perceptions of risk/benefit and (b) breadth of SSD in sexual relationships.*) were not supported (Tables 18 to 21). However, H6a will be further discussed below to highlight the important factors in the relationship between those variables.

As represented in Table 18, H6a proposed that perceptions of risk/benefit and depth of SSD would serially mediate the relationship between CVO and relationship satisfaction. There was an association between CVO and perceptions of risks and benefits with time in the relationship and the type of relationship as covariates, $F(3, 326) = 10.11$, $p < .01$, $R^2 = .09$. However, results indicated that CVO, $b = .05$, $t(326) = 1.24$, $p = .22$, showed no association with perceptions of risks and benefits in sexual relationships. However, when testing the influence of CVO, $b = .15$, $t(325) = 2.99$, $p < .01$, risks and benefits, $b = .73$, $t(325) = 10.70$, $p < .01$, on depth of SSD, the model was significant, $F(4, 325) = 69.90$, $p < .01$, $R^2 = .44$. with both study variables showing a significant association with depth of SSD. This indicates that while CVO does not have a direct relationship with perceptions of risks and benefits, these variables together do

predict the depth of SSD. Finally, CVO, b = .12, t(324) = .382.05, p = .04, risks and benefits, b = .28, t(324) = 3.12, p < .01, depth, b = .17, t(324) = 2.73, p < .01, taken together were found to significantly influence relationship satisfaction, F(3, 149) = 14.04, p < .01, R^2 = .22. A bootstrapped confidence interval for the indirect effect of CVO and relationship satisfaction through risks and benefits and depth of SSD with covariates time and relationship type based on 5,000 bootstrap samples was found to not be different from zero (-.00 to .02), indicating that H6a was not supported (Figure E).

The serial mediation models for RQ7a (*Will the relationship between CFO and relationship satisfaction will be serially mediated through (a) perceptions of risk/benefit and (b) depth of SSD in sexual relationships?*), RQ7b (*Will the relationship between CFO and relationship satisfaction will be serially mediated though (a) perceptions of risk/benefit and (b) breadth of SSD in sexual relationships?*), RQ7c (*Will the relationship between CFO and sexual satisfaction will be serially mediated through (a) perceptions of risk/benefit and (b) depth of SSD in sexual relationships?*), and RQ7d (*Will the relationship between CFO and sexual satisfaction will be serially mediated though (a) perceptions of risk/benefit and (b) breadth of SSD in sexual relationships?*) were non-significant (Tables 22 to 25).

Gender Difference Tests

Independent samples *t*-tests were conducted to examine RQ8a (*What differences in the depth of SSD topics in sexual relationships will be reported between men and women?*), RQ8b (*What differences in the breadth of SSD topics in sexual relationships will be reported between men and women?*), and RQ8c (*What differences in the perception of risk/benefit of SSD topics in sexual relationships will be reported between men and women?*). Five participants were not included in this analysis for not identifying as male or female. There was a significant difference

for depth of SSD, $t(323) = 3.52$, $p < .01$, indicating that women ($M = 2.58$; $SD = .96$) reported more depth of disclosure than men ($M = 2.19$; $SD = 1.01$). Breadth of SSD was also significantly different, $t(323) = -2.02$, $p = .04$, indicating that women ($M = 24.92$; $SD = 5.58$) discussed more sex-related topics than men ($M = 23.50$; $SD = 7.00$). Finally, there was also a significant difference found for perceptions of risks and benefits, $t(323) = -5.41$, $p < .01$, indicating that women ($M = 4.28$; $SD = .59$) perceive more benefit and less risk when considering discussing different sex-related topics with sexual partners than men ($M = 3.90$; $SD = .66$). Independent samples *t*-tests were also used to examine the gender difference between sexual and relationship satisfaction. However, there was no significant gender difference found in sexual, $t(323) = 1.26$, $p = .21$, or relationship satisfaction, $t(323) = -.49$, $p = .62$.

RQ9a (*Will the relationship between relationship satisfaction and depth of SSD in sexual relationships be different for men and women?*), RQ9b (*Will the relationship between relationship satisfaction and breadth of SSD in sexual relationships be different for men and women?*), RQ9c (*Will the relationship between sexual satisfaction and depth of SSD in sexual relationships be different for men and women?*), and RQ9d (*Will the relationship between sexual satisfaction and breadth of SSD in sexual relationships be different for men and women?*) were examined using a simple moderation analysis with gender as a moderator and time in the relationship and relationship type as covariates(Tables 26 to 29) (Hayes, 2018). The analyses for RQ9a-d were non-significant indicating that gender was not a moderating variable for the relationship between depth and breadth of SSD and relationship and sexual satisfaction in sexual relationships.

Chapter 5: Discussion

This dissertation had five primary goals. These goals were to examine 1) the depth and breadth of SSD in sexual relationships, 2) whether disclosure in those sexual relationships was influenced by family communication patterns, 3) if perceptions of risks and benefits mediated the relationship between family communication patterns and disclosure, 4) how relationship and sexual satisfaction was influenced by family communication patterns, perceptions of risks and benefits, and disclosure in sexual relationships, and 5) whether gender differences existed in SSD and satisfaction in sexual relationships. This study found that there was the greatest support for depth of SSD as a mediator for the relationship between CVO and satisfaction in sexual relationships. The remainder of this discussion will explore these results in light of prior research and theory. Finally, limitations and future directions for research will be discussed.

Disclosure and the Topic of Sex

According to the assumptions of SPT, as partners' disclosure increases in depth and breadth, their relationship will progress through the stages of relationship development, building more feelings of intimacy and trust as that relationship is fostered (Carpenter & Greene, 2016; Mongeau & Miller-Henningsen, 2015). It was believed that sex-related topics would fall within the intermediate and central layers of SPT's onion analogy because of the highly personal nature of the disclosures and the potential risk associated with sharing that information (Ayres, 1979; Carpenter & Greene, 2016; Taylor & Altman, 1975). These conversations are higher cost to the discloser because of the potential for embarrassment and the threat to face for both partners that the information could represent (Ayres, 1979). Thus, generally lower depth and breadth of SSD was expected to be reported. However, disclosure about sex-related topics was relatively high; breadth of SSD averaged about 24 out of 29 topics being discussed and the depth of sex-related

topics being between somewhat and moderately discussed. In past studies that also examined SSD in sexual relationships (e.g., Brown & Weigel, 2018, Byers & Demmons, 1999; La France, 2019), similar levels of depth and breadth of SSD were found, suggesting that a high level of SSD is normative in sexual relationships among young adults.

To share this highly personal information, SPT assumes that there would be low uncertainty concerning the relationship and feelings of trust (Knobloch & Carpenter-Theune, 2004; Taylor & Altman, 1975). SPT would also suggest that the sexual partners would feel more comfortable with offering criticism as well as would have the ability to predict how their partner might respond, allowing them to anticipate the outcome of the conversation (Carpenter & Green, 2016, Mongeau & Miller-Henningsen, 2015). With the level of disclosure of sex-related topics being disclosed in this study, without knowing about the depth and breadth of their general communication, relationships would likely fall in the affective exchange stage of SPT or in the stable stage for the closest of relationships (Allensworth, 1996; Carpenter & Greene, 2016; Mongeau & Miller-Henningsen, 2015). Thus, discussions on the sex-related topics may not seem as much of a threat to the relationship leading to more depth and breadth of SSD.

Both depth and breadth were highly correlated with the type of relationship and moderately correlated with the length of the relationship. It could be argued that these factors played a role in the increased SSD. Approximately 71% of participants reported that they were in an exclusive dating relationship or engaged, suggesting that they were in established relationships. Ritter et al. (2021) found that the relationship type did have an impact on SSD and satisfaction where individuals in more casual, short-term relationships were less likely to disclose private sexual information than those in long-term relationship. Yet, in a recent meta-analysis of SSD, relationship type was found to have only a small effect overall on disclosure

with the strongest effect for married couples (Mallory, 2021). It was also found that the length of the relationship was not a significant influence on SSD among studies examining disclosure and satisfaction (Mallory, 2021). As relationship type and time in the relationship do not fully explain the generally high depth and breadth of SSD, the assumption of SPT that disclosure rather than time together is most important for relationship development is supported.

To examine depth and breadth of SSD more closely, the 29 sex-related topics measured were assessed individually. Sex-related topics discussed with the highest depth and breadth were related to safe sex practices and disclosures that are likely accompanied by positive affect. These topics included condoms, birth control, relationship exclusivity, and sexual satisfaction. Things enjoyed about sex, sexual health, and STIs were also ranked high. This finding is meaningful because while not all of the 29 sex-related topics measured are important to discuss for each relationship type, conversations surrounding safe sex (e.g., wearing condoms, using birth control, STI status, etc.) are encouraged in all sexual relationships. It also makes sense that relationship exclusivity is ranked high since many participants were in an exclusive dating relationship. Conversely, faking an orgasm, initiating sex, pornography, and sexual thoughts and fantasies were reported with the lowest depth and breadth. These topics may be viewed as negative or taboo, which would lead to a lower willingness to disclose because positive feelings and likes are more likely to be discussed than dislikes (Byers & Demmons, 1999; La France, 2019). Additionally, more positive disclosures will feel less risky and more rewarding than disclosures with negative affect that could be hurtful or damaging to the partner's face or uncomfortable for the discloser (Knobloch & Carpenter-Theune, 2004; La France, 2019; Taylor & Altman, 1975).

In general, sex-related topics were viewed as more beneficial than risky to discuss with sexual partners. Again, birth control (M = 4.68), STIs (M = 4.55), condoms (M = 4.53), and

sexual health (*M* = 4.39) were among the topics to be viewed as least risky and most beneficial. This speaks to the message of the importance of enacting safe sex behaviors. In contrast, faking an orgasm (*M* = 3.34), anal sex (*M* = 3.45), and past sexual behaviors (*M* = 3.52) were ranked lowest among the 29 topics. Surprisingly, these topics still averaged between neutral and more beneficial than risky. Thus, while these topics may have been more negatively viewed or uncomfortable, it was still acknowledged that conversations about these topics were important to have with sexual partners. Since most participants were in exclusive dating relationships reporting high relationship and sexual satisfaction, there could be a higher level of trust that would make these conversations, while still probably uncomfortable, easier to discuss. Disclosers must weigh the costs and rewards associated with every communication episode, but SPT also recognizes that as relationships grow in intimacy and build trust, some disclosures that may have been very risky at the beginning of the relationship would not continue to be that level of risk (Stafford, 2015; Taylor & Altman, 1975). Moreover, Brown and Weigel (2018) found that open, supportive, and already satisfying relationships were more likely to report more SSD, which is consistent with the high correlations between disclosure and satisfaction found in this study (see Table 1) and could explain the perceptions of more benefits and less risk for participants, ultimately leading to more depth and breadth of SSD.

Another possibility is that the single item measure of risks and benefits used in this dissertation may provide an inaccurate estimation of how risky something is. This measure suggests that the benefits are greater than the risks, but that may obscure the risk associated with the conversation. While this instrument was used in the present study to reflect SPT and lower participant burden, studies focusing on the risks and benefits of SSD may want a more complex measure of each topic.

Relationships Among FCP, Disclosure, and Satisfaction

The 29 sex-related topics were examined in relation to family communication patterns. CVO was mildly correlated with average depth and breadth of SSD as well the individual depth of SSD for most of the topics but not for the breadth of individual topics (see Table 3). Considering the emphasis on open communication supported by families reporting greater CVO, it is not surprising that there is a correlation with depth. This could indicate that people coming from families with greater CVO could be slightly more open to communicating more deeply about sex-related topics (Koerner & Fitzpatrick, 2002). CFO was not correlated with depth or breadth of SSD, meaning that there is no relationship between participants' reporting greater CFO and their disclosure of sex-related topics in their sexual relationships.

One of the most consistent findings of the present manuscript was that depth of disclosure was a mediator of the relationship between CVO and both relationship and sexual satisfaction. As greater CVO was reported, so too was depth, which led to more relationship and sexual satisfaction. By contrast, breadth was also found to mediate the relationship between CVO and sexual satisfaction but not relationship satisfaction. This brings attention to the difference between the role of depth and breadth in terms of relationship development. While both depth and breadth of disclosure are identified by SPT as being important for increasing intimacy and progressing in the stages of relationship development, perhaps the depth of SSD was more impactful in this context (Carpenter & Greene, 2016; Mongeau & Miller-Henningsen, 2015). Providing more details about sexual preferences or experiences appears to be more important for relationship and sexual satisfaction than covering every sex-related topic. As disclosure is increasing through the layers of intimacy, the value of depth of disclosure may be more salient as individuals disclose intermediate and central layer information, which includes more personal

details (Carpenter & Greene, 2016). Going into more depth could also lead to better communication about sexual needs and wants, ultimately leading to more sexual satisfaction. It is also important to note that CVO is still correlated with more relationship and sexual satisfaction even when accounting for depth and breadth, therefore, the influence of CVO on satisfaction is also present beyond what is explained by disclosure (see Tables 8 to 11).

Because of the inconsistency in past research on CFO, it was unclear how CFO would influence disclosure and satisfaction. Yet, with how this dimension of family communication has been conceptualized in the past (e.g., less discussion, conflict avoidance), it was expected that CFO would be associated with less depth and breadth of SSD and lower relationship and sexual satisfaction (Avtgis, 1999; Fowler et al., 2010, Koerner & Fitzpatrick, 2002; Koerner et al., 2018). However, CFO was found to have no relationship with disclosure or satisfaction. Similarly, Hurst et al. (2021) examined sexual decision making among adolescents using FCPT and found that while family types with high CVO (pluralistic and consensual) were more likely to disclose to sexual partners, there was no association found with lassie-faire or protective family types. This finding echoes the lack of correlation found for CFO in the present study.

While the results of these mediation analyses were not supported, the findings are significant to consider in terms of FCPT and how CFO is framed. It has already been acknowledged that past research using an older version of a CFO measurement has conceptualized CFO in a more negative light because of the emphasis placed on conflict avoidance and lower disclosure (Hesse et al., 2017; Horstman et al., 2018; Schrodt & Koerner, 2014). However, the findings of this study demonstrate that families who are greater in CFO do not negatively impact the depth and breadth of SSD for children in their future adult relationships.

While CFO did not correlate with disclosure and satisfaction when considered on its own, there was a significant interaction between CVO and CFO when predicting depth of SSD (see Figure D). It is interesting that while CFO is not directly correlated with depth, it still has an influence when CVO is very low. Thus, it may be illustrative to consider the typology of the four family types. In this dissertation, participants from pluralistic families (i.e., high CVO, low CFO) reported the highest depth of SSD. Within this family type, open communication across multiple topics is encouraged (Koerner & Fitzpatrick, 2006). Montesi et al. (2011) found that more open communication about nonsexual private information also contributes to more comfort with SSD, which would indicate that couples reporting higher SSD likely have open communication across other topics. Similarly, consensual families (i.e., high CVO, high CFO) also reported high depth of SSD, not significantly different from pluralistic families. This family type is also more likely to have open discussion, but some topics may be more difficult to discuss if they do not align with the family values (Koerner & Fitzpatrick, 2006).

Interestingly, the results of the interaction effect also suggested that for protective families (i.e., low CVO, high CFO), there was more disclosure in comparison to laissez-faire families (i.e., low CVO, low CFO). It was predicted that greater CFO would result in decreased depth of SSD because of the general negative connotations often associated with this dimension, such as less discussion and avoidance of conflict (Hesse et al., 2017). However, that was not found to be the case in the context of SSD when both CVO and CFO were accounted for. So, how can this be explained? Families reporting greater CFO are very family-oriented and encourage homogeneity of values, beliefs, and behaviors. For sexual relationships categorized as exclusive dating relationships, the partners may view each other as family as well and seek to maintain that close relationship through SSD, which was acknowledged as more beneficial by

sexual partners and correlated with both relationship and sexual satisfaction. It could also be the case that sex communication or safe sex was valued in these families leading to more depth of SSD even when CVO was low because of CFO's characteristic of encouraging homogeneity of values, beliefs, and behaviors. Finally, laissez-faire families reported low depth of SSD, consistent with the conceptualization of this family type as uncommunicative (Koerner & Fitzpatrick, 2006), which was also supported by the results of this project. By looking at the family communication patterns typology, it is clear that the relationship between CVO and CFO and how these dimensions of family communication influence disclosure needs to be further explored.

Perceptions of Risk and Family Communication Patterns

It was hypothesized that perceptions of risks and benefits and depth and breadth of SSD would serially mediate the relationship between family communication patterns and satisfaction. However, perceptions of risks and benefits was not a mediator, yet was highly correlated with depth and moderately correlated with breadth and relationship and sexual satisfaction. According to SPT, an evaluation of costs (i.e., risks) and rewards (i.e., benefits) occurs before disclosures, which explains the strong to moderate correlation with depth and breadth of SSD (Taylor & Altman, 1975). Additionally, relationship and sexual satisfaction would be expected to be closely related to how individuals perceive sex-related topics as more risky or more beneficial because of the increased disclosure when low cost is perceived (Brown & Weigel, 2018; Mark & Jozkowski, 2013; Mongeau & Miller-Henningsen, 2015; Montesi et al., 2011; Rehman et al., 2011). So, as partners become more intimate and build trust, they will be more satisfied in their relationships and more willing to disclose about topics they may have originally viewed as too risky (Taylor & Altman, 1975). Yet, family communication patterns were not related to

perceptions of risks and benefits, even though CVO showed a correlation with disclosure. Therefore, the consensus among participants that SSD is beneficial outweighs any influence their family of origin might have had.

One possibility is that because participants saw the sexual topics as being more beneficial than risky, even taboo and uncomfortable topics like pornography and anal sex, there was not sufficient variability to explain in the FCPT analyses. This, again, could be examined more carefully in future studies using multi-item measures of both risks and benefits. Additionally, rather than examining how family communication patterns might influence how individuals evaluate the costs and rewards of disclosure, more focus should be on the content of the potential disclosure and the relationship between the sexual partners. Past research has indicated that people consider how sharing private information, such as sexual likes and dislikes, can be risky and a threat to their face and their partner's face (La France, 2019; Montesi et al., 2011). It has also been found that disclosers consider the state of their relationship when evaluating costs and rewards as well. Open, supportive, and trusting relationships are more likely to encourage SSD because partners are better able to anticipate reactions in closer relationships (Allensworth, 1996; Brown & Weigel, 2018; Mongeau & Miller-Henningsen, 2015). So, how people perceive risks and benefits in association with sex-related topics could be influenced by more satisfaction and trust in the relationship.

Gender Differences

Past research has reported inconsistent findings when examining gender in relation to SSD. When there is a difference in disclosure between women and men, it is usually small (Mallory, 2021). For instance, Byers and Demmons (1999), Coffelt and Hess (2014), and Green and Faulkner (2005) all found that women reported more self-disclosure than men for sexual and

nonsexual topics. Yet, there was no gender difference in the sex-related topics discussed (La France, 2019), feelings of discomfort or difficulty disclosing about sexual preferences (Byers & Demmons, 1999), reasons for avoidance of SSD (Anderson et al., 2011), or deceptive affectionate messages about sex (Bennett & Denes, 2019) in other past research. This dissertation found that women reported slightly more depth and breadth than men and also perceived sex-related topics as less risky and more beneficial. Even though women reported more depth and breadth of SSD than men, there was no gender difference for relationship or sexual satisfaction. Perhaps women perceive disclosure about sex-related topics to be more beneficial for their own satisfaction. Other studies have suggested that it is possible that women feel that they need to communicate about sex more to disclose their sexual needs in order to be satisfied in the sexual relationship, leading to more depth and breadth, whereas men have been found in other studies to be more sexually satisfied than women regardless of the amount of SSD, however, this interaction effect was not supported in this study (Mark et al., 2015). Ultimately, the most conservative explanation is gender differences are small (Mallory, 2021), and gender differences play only a small role in this context.

Implications and Future Directions

To summarize, depth and breadth of SSD were found to be mediators for the relationship between CVO and sexual satisfaction, with depth also mediating for CVO and relationship satisfaction. CFO had no association with disclosure or satisfaction. In addition, perceptions of risks and benefits, while closely correlated with disclosure, was not related to family communication patterns. Slight gender differences were present in disclosure and perceptions of risks and benefits but not satisfaction. There are several ways this manuscript has contributed to

the development of SPT and FCPT. The following section will examine the theoretical and practical implications of the findings as well as recommendations for areas of future study.

This research further develops the characteristics of CFO and framed this dimension of family communication in a non-negative light due to the utilization of the ECOS. It will be important for previous researchers to replicate studies using the ECOS to get a better understanding of how this newer scale might change the way CFO is conceptualized. For instance, past research has related CFO to decreased depth and breadth of disclosure in interpersonal relationships, yet the findings in this dissertation can be used to argue that this is not accurate for every context (Keating, 2016; Koerner & Fitzpatrick, 2002; Koesten, 2004). Additionally, it is clear that increasing depth and breadth of SSD and a greater willingness to engage in uncomfortable conversations are related to open communication, which is characteristic of CVO and consistent with past research (Brown & Weigel, 2018; Koerner & Fitzpatrick, 2002; Koerner & Schrodt, 2014; Montesi et al., 2011). Families who are seeking to ensure their children experience satisfaction in their future relationships, should encourage open communication. These results also have important implications for sexual partners who desire to improve or maintain their relationship and sexual satisfaction.

Further support for the tenets of SPT were also illustrated. Participants were reporting relatively high depth and breadth of SSD as well as relationship and sexual satisfaction. Additionally, the majority of sexual relationships were categorized as exclusively dating or engaged, lending support for the idea that increased disclosure leads to more intimacy and closeness in the relationship. Because the length of the relationship was also controlled for in the analyses, it can be argued that the amount of disclosure and satisfaction in these relationships was not solely due to how much time the individuals had been together. SPT's minimax principle

was also supported by these findings. There was a strong correlation with how beneficial sexual partners viewed each topic to be and their breadth and depth of disclosure. Thus, the sex-related topics were disclosed with more depth and breadth because participants perceived that the rewards of disclosure outweighed the costs to themselves and their relationship. Future research should more closely examine how sexual partners navigate decisions to disclose and what criteria they base those decisions on. Consequently, Communication Privacy Management Theory could be used to inform in this context to identify the different privacy rules associated with SSD. By identifying criteria upon which SSD is evaluated as either risky or beneficial, researchers, psychologists, and counselors could be better informed on how they might encourage sexual partners to communicate about uncomfortable sex-related topics.

As another practical application, the list of 29 sex-related topics could be used as a tool for researchers to examine which topics are discussed more easily and which are viewed as off-limits to get a clearer picture of parameters of SSD in sexual relationships. Future research could also identify what sex-related conversations sexual partners wanted to have but were not having. For couples, this list could create a chance to be reflective about their own disclosures about sex with their sexual partners and consider which topics they feel need to be talked about more. Because SSD has such a strong correlation with relationship and sexual satisfaction, some of these topics could be used as starting points by therapists to facilitate more discussion and intimacy for couples seeking to strengthen their relationship.

The evaluation of sex-related topics as positive or negative in relation to the willingness to disclose also needs further attention. Past research has indicated that more positive disclosures are more likely than negative disclosures and lead to increased satisfaction (Coffelt & Hess, 2014; Mark & Jozkowski, 2013). This dissertation also found support for more positively viewed

(i.e., sexual likes) or necessary topics (i.e., safe sex topics) being discussed with greater depth and breadth. However, all of the 29 sex-related topics were viewed as more beneficial than risky and were each positively correlated with relationship and sexual satisfaction. Future research should consider how individuals evaluate different sex-related topics as either positive or negative, possibly based on the costs and rewards of disclosure. Are these topics actually negative or are they just taboo or more uncomfortable? Additionally, the relationship between family communication patterns and disclosure of positively and negatively viewed topics should be examined. For instance, is CVO a greater predictor of positive disclosures than negative disclosures or all sex-related topics in general?

Limitations

As with all studies, there are limitations. First, data was collected from a predominately White university and resulted in a homogenous sample of White, Christian, and heterosexual participants. To determine whether race/ethnicity, religiosity, or sexual orientation impacts perceptions of risks and benefits of SSD as well as depth and breadth in sexual relationships, more diversity in the sample is needed. In future research, more intent should be placed on gathering a representative sample of minority groups, possibly by focusing solely on those populations. Additionally, only unmarried participants in emerging adulthood (i.e., 18 to 25 years old) participated in this study. To get a fuller illustration of how FCPs and SSD might influence satisfaction, more variation in participant age and relationship type should be included.

Second, data was collected through self-reporting from only one partner in the sexual relationship. Collecting dyadic data would better illustrate the depth and breadth of SSD occurring in these relationships. It would also add complexity to the analysis in which comparisons could be made between both sexual partners' views on whether topics have been

fully discussed. Dyadic data could provide more insight on the rule of mutual reciprocity as well. For heterosexual couples, dyadic data could offer more clarify on the inconsistency found in gender differences. Such data could show whether paired sexual partners report similar levels of depth and breadth of SSD, or whether women still report more disclosure than their male partners because they *perceive* depth and breadth differently?

Third, the directions for the SSD scale used to measure depth and breadth may have led to confusion and need to be clarified. Participants were told to select the extent to which they had discussed each of the sex-related topics with their sexual partner. A statement should have been made in the directions to select "Have Not Discussed" if that topic had not been verbally communicated. Without this clarification, it was ambiguous to participants which option they should select if they had not communicated about a topic but did not feel that they needed to. For instance, many people may not feel that kissing preferences is important to discuss in a relationship, and while they did not have that conversation with their sexual partner, they still may feel that it was fully discussed and select that option. This uncertainty could have led to higher depth and breadth being reported.

Finally, the data in this dissertation was collected during the COVID-19 pandemic in April/May 2021 and September 2021. COVID-19 vaccines were available at both data collection times; however, social distancing and mask recommendations were still in effect in high-risk parts of the United States, which included the location of this midwestern university. Participants may or may not have been exclusively taking online classes during this time and/or avoiding social gatherings. To mitigate this potential threat, the inclusion criteria requiring sexual activity within the last 12 months included mutual masturbation in that definition to allow for social

distancing protocols. However, the COVID-19 pandemic could have impacted disclosures and interactions between sexual partners in this dissertation.

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Tables

Table 1

Correlations for CVO/CFO, Depth and Breadth, Risk and Benefits, and Satisfaction

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Breadth	24.31	6.23	--								
2. Depth	2.41	.99	.83**	--							
3. Risk/Bene	4.12	.65	.40**	.58**	--						
4. CVO	3.58	.83	.16**	.23**	.11*	--					
5. CFO	3.70	.62	-.00	.01	-.00	-.47**	--				
6. Sex.	4.25	.82	.27**	.38**	.38**	.17**	.01	--			
7. Rel.	4.09	.98	.39**	.42**	.37**	.21**	-.01	.59**	--		
8. Time	15.77	16.10	.29**	.31**	.18**	.11*	-.022	.12*	.22**	--	
9. Type	3.47	.91	.48**	.43**	.28**	.15**	-.04	.22**	.42**	.33**	--

** Correlation is significant at the 0.05 level (2-tailed)*
*** Correlation is significant at the 0.01 level (2-tailed)*

Table 2

Means, Standard Deviations, and Breadth Score for Sexual Self-Disclosure Topics

Sexual Self-Disclosure Topic	N	Breadth Total	Depth		Risk/Benefit	
			M	*SD*	*M*	*SD*
Condoms	330	320[i]	3.26[i]	1.10	4.53	.93
Birth Control	330	301	3.18	1.30	4.68[i]	.75
Relationship Exclusivity	330	296	3.06	1.40	4.27	1.13
Sexual Satisfaction	330	313	2.80	1.22	4.32	.99
Oral Sex	330	306	2.73	1.26	4.37	.95
Vaginal Sex	330	301	2.73	1.32	4.38	.86
Sexual Partners	330	289	2.69	1.49	3.62	1.28
Enjoy About Sex	330	309	2.68	1.18	4.35	.86
Sexual Health	330	285	2.55	1.45	4.39	.98
STIs	330	283	2.55	1.49	4.55	.92
Part of Relationship	330	289	2.53	1.36	4.22	.98
Turn Down Sex	330	271	2.43	1.50	4.37	.96
Affection Expression	330	282	2.42	1.43	4.33	.95
Role of Sex	330	291	2.40	1.35	4.21	.98
Sexual Morality	330	278	2.38	1.44	4.15	1.06
Disliked Aspects	330	284	2.33	1.42	4.13	1.19
Kissing Preferences	330	280	2.30	1.41	4.32	.88
Masturbation	330	268	2.26	1.47	3.95	1.12

Past Sexual Behavior	330	270	2.25	1.49	3.52	1.24
Frequency of Sex	330	274	2.23	1.41	4.11	1.06
Sexting	330	258	2.20	1.51	4.09	1.06
Feeling Anxious	330	266	2.16	1.45	4.16	1.08
Anal Sex	330	227	2.13	1.71	3.45	1.61
Duration of Sex	330	263	2.13	1.48	4.03	1.08
Sexual Difficulties	330	255	2.09	1.51	4.07	1.13
Thoughts/Fantasies	330	272	2.00	1.31	3.70	1.18
Pornography	330	245	1.98	1.52	3.61	1.27
Initiating Sex	330	256	1.96	1.50	4.26	.92
Faking Orgasm	330	191[ii]	1.53[ii]	1.58	3.34[ii]	1.37

Note: All variables are ranked by depth from highest to lowest
[i] *Denotes the highest score*
[ii] *Denotes the lowest score*

Table 3

Correlations for CVO/CFO with Individual Sexual Self-Disclosure Topics

Sexual Self-Disclosure Topics	Depth		Risk/Bene.	
	CVO	CFO	CVO	CFO
Duration of Sex	.27**	-.05	.12*	-.03
Affection Expression	.26**	- .03	.10	.08
Initiating Sex	.23**	.01	.05	.01
Disliked Aspects	.21**	.00	.09	.01
Turn Down Sex	.19**	.01	.10	.01
Faking Orgasm	.19**	.03	.14*	.00
Kissing Preferences	.18**	-.00	.05	-.02
STIs	.18**	.03	-.00	-.04
Role of Sex	.18**	.01	.05	.05
Sexual Partners	.17**	-.09	.10	-.08
Sexual Health	.17**	-.05	.08	-.02
Sexual Morality	.17**	.08	.13*	.01
Sexual Difficulties	.17**	-.02	.08	-.02
Sexual Satisfaction	.17**	-.05	.12*	.02
Pornography	.17**	.02	.01	.09
Sexting	.17*	.01	.06	.03
Frequency of Sex	.17*	.04	.10	-.04
Past Sexual Behavior	.17*	-.02	.15**	-.05
Masturbation	.16*	.03	.04	.00

Birth Control	.15*	-.03	.10	-.06
Thoughts/Fantasies	.14*	.02	.06	-.01
Condoms	.12*	-.01	-.01	-.02
Enjoy About Sex	.12*	.03	.02	.02
Relationship Exclusivity	.12*	.01	.06	.02
Feeling Anxious	.16	-.04	.13*	-.01
Part of Relationship	.16	.04	.09	.01
Anal Sex	.03	.03	-.03	-.03
Oral Sex	.02	.12	-.03	.01

Note: All variables are ranked by correlation between CVO and depth from highest to lowest
* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Table 4

Risk/Benefit Did Not Mediate Relationship Between CVO and Depth (H4a)

	M (Risk/Bene.)					Y (Depth)				
Antecedent	*b*	SE	p	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CVO)	.05	.04	.23	-.03	.13	.16	.05	.00	.06	.26
M (Risk/Bene.)	-	-	-	-	-	.73	.07	.00	.59	.86
C_1 (Time)	.00	.00	.10	.00	.01	.01	.00	.00	.00	.01
C_2 (Type)	.17	.04	.00	.09	.25	.25	.05	.00	.15	.35
X-M-Y	-	-	-	-	-	.04	.03	-	-.02	.10
Constant	3.28	.19	.00	2.91	3.65	-2.13	.32	.00	-2.75	-1.51
	R^2 = .09 F (3, 326) = 11.04, p < .01					R^2 = .66 F (4, 325) = 63.76, p < .01				

Table 5

Risk/Benefit Did Not Mediate Relationship Between CVO and Breadth (H4b)

	M (Risk/Bene.)					Y (Breadth)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CVO)	.05	.04	.23	-.03	.13	.44	.35	.21	-.25	1.12
M (Risk/Bene.)	-	-	-	-	-	2.65	.46	.00	1.74	3.55
C_1 (Time)	.00	.00	.10	.00	.01	.04	.02	.02	.01	.08
C_2 (Type)	.17	.04	.00	.09	.25	2.44	.34	.00	1.76	3.12
X-M-Y	-	-	-	-	-	.13	.11	-	-.07	.36
Constant	3.28	.19	.00	2.91	3.65	2.69	2.18	.22	-1.59	6.97
	R^2 = .09 F (3, 326) = 11.04, p < .01					R^2 = .32 F (4, 325) = 38.76, p < .01				

Table 6

Risk/Benefit Did Not Mediate Relationship Between CFO and Depth (RQ4a)

	M (Risk/Bene.)					Y (Depth)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CFO)	.01	.06	.87	-.10	.12	.04	.07	.56	-.09	.17
M (Risk/Bene.)	-	-	-	-	-	.74	.07	.00	.61	87
C_1 (Time)	.00	.00	.08	.00	.01	.01	.00	.00	.00	.01
C_2 (Type)	.18	.04	4.47	.10	.26	.27	.05	.00	.17	.01
X-M-Y	-	-	-	-	-	.01	.04	-	-.07	.09
Constant	3.40	.25	.00	2.91	3.89	-1.84	.38	.00	-2.59	-1.09
	R^2 = .09 F (3, 326) = 10.54, p < .01					R^2 = .42 F (4, 325) = 59.78, p < .01				

Table 7

Risk/Benefit Did Not Mediate Relationship Between CFO and Breadth (RQ4b)

	M (Risk/Bene.)					Y (Breadth)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CFO)	.01	.06	.87	-.10	.12	.15	.46	.74	-.75	1.05
M (Risk/Bene.)	-	-	-	-	-	2.68	.46	.00	1.78	3.59
C_1 (Time)	.00	.00	.08	.00	.01	.05	.02	.02	.01	.08
C_2 (Type)	.18	.04	.00	.10	.26	2.49	.34	.00	1.81	3.16
X-M-Y	-	-	-	-	-	.02	.15	-	-.25	.33
Constant	3.40	.25	.00	2.91	3.59	3.35	2.60	.20	-1.76	8.46
	R^2 = .09 F (3, 326) = 10.54, p < .00					R^2 = .32 F (4, 325) = 38.23, p < .01				

Table 8

Depth Mediates Relationship Between CVO and Relationship Satisfaction (H5a)

	M (Depth)					Y (Rel. Sat.)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CVO)	.19	.06	.00	.08	.31	.12	.06	.05	.00	.23
M (Depth)	-	-	-	-	-	.27	.05	.00	.17	.38
C_1 (Time)	.01	.00	.00	.00	.02	.00	.00	.49	.00	.01
C_2 (Type)	.37	.06	.00	.26	.49	.30	.06	.00	.18	.41
X-M-Y	-	-	-	-	-	.05	.02	-	.02	.10
Constant	.25	.26	.34	-.27	.77	1.96	.26	.00	1.45	2.47
	R^2 = .24 F (3, 326) = 33.75, p < .01					R^2 = .26 F (4, 325) = 28.23, p < .01				

Table 9

Depth Mediates Relationship Between CVO and Sexual Satisfaction (H5b)

	M (Depth)					Y (Sex. Sat.)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CVO)	.19	.06	.00	.08	.31	.08	.05	.12	-.02	.18
M (Depth)	-	-	-	-	-	.27	.05	.00	.18	.37
C_1 (Time)	.01	.00	.00	.00	.02	.00	.00	.80	-.01	.00
C_2 (Type)	.37	.06	.00	.26	.49	.07	.05	.20	-.04	.17
X-M-Y	-	-	-	-	-	.05	.02	-	.02	.09
Constant	.25	.26	.34	-.27	.77	3.08	.23	.00	2.63	3.53
	R^2 = .24 F (3, 326) = 33.75, p < .01					R^2 = .15 F (4, 325) = 14.82, p < .01				

Table 10

Breadth Did Not Mediate Relationship Between CVO and Relationship Satisfaction (H5c)

	M (Breadth)					Y (Rel. Sat.)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CVO)	.57	.36	.12	-.15	1.28	.15	.06	.01	.03	.26
M (Breadth)	-	-	-	-	-	.03	.01	.00	.02	.05
C_1 (Time)	.05	.02	2.76	.02	.09	.00	.00	.30	.00	.01
C_2 (Type)	2.90	.35	.00	2.21	3.59	.30	.06	.00	.18	.42
X-M-Y	-	-	-	-	-	.02	.01	-	-.01	.05
Constant	11.38	1.64	.00	8.16	14.60	1.64	.28	.00	1.08	2.19
	$R^2 = .25$ F (3, 326) = 37.08, $p = .00$					$R^2 = .24$ F (4, 325) = 25.12, $p < .01$				

Table 11

Breadth Mediates Relationship Between CVO Sexual Satisfaction (H5d)

	M (Breadth)					Y (Sex. Sat.)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CVO)	.57	.36	.12	-.15	1.28	.12	.05	.02	.02	.22
M (Breadth)	-	-	-	-	-	.03	.01	.00	.01	.04
C_1 (Time)	.05	.02	2.76	.02	.09	.00	.00	.30	.00	.01
C_2 (Type)	2.90	.35	.00	2.21	3.59	.09	.06	.09	-.02	.20
X-M-Y	-	-	-	-	-	.01	.01	-	.00	.04
Constant	11.38	1.64	.00	8.16	14.60	2.86	.25	.00	2.36	3.36
	R^2 = .25 F (3, 326) = 37.08, p = .00					R^2 = .10 F (4, 325) = 8.96, p < .01				

Table 12

Depth Did Not Mediate Relationship Between CFO and Relationship Satisfaction (RQ5a)

	M (Depth)					Y (Rel. Sat.)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CFO)	.05	.08	.56	-.11	1.37	.00	.08	.96	-.15	.15
M (Depth)	-	-	-	-	-	.29	.05	.00	.19	.40
C_1 (Time)	.01	.00	.00	.01	.02	.00	.00	.45	.00	.01
C_2 (Type)	.40	.06	.00	.29	.51	.30	.06	.00	.19	.42
X-M-Y	-	-	-	-	-	.01	.02	-	-.03	.06
Constant	.68	.35	.06	-.02	1.37	2.32	.35	.00	1.64	3.00
	R^2 = .21 F (3, 326) = 29.39, p < .01					R^2 = .25 F (4, 325) = 26.94, p < .01				

Table 13

Depth Did Not Mediate Relationship Between CFO and Sexual Satisfaction (RQ5b)

	M (Depth)					Y (Sex. Sat.)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CFO)	.05	.08	.56	-.11	1.37	.01	.07	.94	-.13	.14
M (Depth)	-	-	-	-	-	.29	.05	.00	.19	.38
C_1 (Time)	.01	.00	.00	.01	.02	.00	.00	.84	-.01	.00
C_2 (Type)	.40	.06	.00	.29	.51	.07	.05	.17	-.03	.17
X-M-Y	-	-	-	-	-	.01	.02	-	-.03	.06
Constant	.68	.35	.06	-.02	1.37	3.31	.31	.00	2.70	3.91
	R^2 = .21 F (3, 326) = 29.39, p < .01					R^2 = .15 F (4, 325) = 14.10, p < .01				

Table 14

Breadth Did Not Mediate Relationship Between CFO and Relationship Satisfaction (RQ5c)

	M (Breadth)					Y (Rel. Sat.)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CFO)	.15	.48	.71	-.77	1.12	.00	.08	.97	-.15	.16
M (Breadth)	-	-	-	-	-	.04	.01	.00	.02	.05
C_1 (Time)	.06	.02	.00	.02	.10	.00	.00	.25	.00	.01
C_2 (Type)	2.97	.35	.00	2.28	3.66	.31	.06	.00	.19	.43
X-M-Y	-	-	-	-	-	.01	.02	-	-.03	.05
Constant	12.47	2.17	.00	8.20	16.75	2.06	.37	.00	1.34	2.78
	$R^2 = .25$ F (3, 326) = 36.05, $p < .01$					$R^2 = .22$ F (4, 325) = 23.08, $p < .01$				

Table 15

Breadth Did Not Mediate Relationship Between CFO and Sexual Satisfaction (RQ5d)

	M (Breadth)					Y (Sex. Sat.)				
Antecedent	*b*	SE	*p*	LLCI	ULCI	*b*	SE	*p*	LLCI	ULCI
X (CFO)	.15	.48	.71	-.77	1.12	.01	.07	.85	-.12	.15
M (Breadth)	-	-	-	-	-	.03	.01	.00	.01	.04
C_1 (Time)	.06	.02	.00	.02	.10	.00	.00	.67	.00	.01
C_2 (Type)	2.97	.35	.00	2.28	3.66	.10	.06	.06	-.01	.21
X-M-Y	-	-	-	-	-	.00	.01	-	-.03	.04
Constant	12.47	2.17	.00	8.20	16.75	3.16	.33	.00	2.51	3.81
	R^2 = .25 F (3, 326) = 36.05, p < .01					R^2 = .09 F (4, 325) = 7.58, p < .01				

Table 16

CVO and CFO Interacted to Predict Depth of SSD (RQ6a)

	Depth (Y)				
Antecedent	*b*	SE	*p*	LLCI	ULCI
Constant	.92	.19	.00	.55	1.29
CVO (X)	.34	.07	.00	.20	.47
CFO (W)	.18	.09	.04	.01	.35
CVO x CFO (XW)	-.34	.09	.00	-.51	-.16
C_1 (Time)	.01	.00	.00	.00	.02
C_2 (Type)	.36	.06	.00	.56	.47
	R^2 = .28, MSE = .72 F (5, 324) = 25.61, p < .01				

Table 17

CVO and CFO Did Not Interact to Predict Breadth (RQ6b)

	Breadth (Y)				
Antecedent	*b*	SE	*p*	LLCI	ULCI
Constant	13.31	1.19	.00	10.97	15.64
CVO (X)	1.07	.53	.01	.23	1.90
CFO (W)	.56	.54	.30	-.51	1.92
CVO x CFO (XW)	-1.30	.56	.02	-2.40	-.20
C_1 (Time)	.05	.02	.01	.01	.09
C_2 (Type)	2.85	.35	.00	2.17	3.54
	R^2 = .27, MSE = 28.75 F (5, 324) = 23.99, p < .01				

Table 18

Regression Coefficients, Standard Errors, and Model Summary Information for Non-Significant Serial Mediation of CVO and Relationship Satisfaction (H6a)

	M_1 (Risk/Bene.)			M_2 (Depth)			Y (Rel. Sat.)		
Antecedent	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
X (CVO)	.05	.05	.22	.16	.05	.00	.12	.06	.04
M_1	-	-	-	.73	.00	.00	.28	.09	.00
M_2	-	-	-	-	-	-	.17	.06	.01
C_1 (Time)	.00	.00	.12	.01	.00	.01	.00	.00	.35
C_2 (Type)	.18	.04	.00	.25	.05	.00	.29	.07	.00
Constant	3.28	.19	.00	-2.13	.29	.00	1.08	.42	.01
	R^2 = .09 F (3, 326) = 10.11, p < .01			R^2 = .44 F (4, 325) = 69.90, p < .01			R^2 = .28 F (5, 324) = 22.68, p < .01		
	b = .01, SE = .01, LLCI = -.00, ULCI = .02								

Table 19

Regression Coefficients, Standard Errors, and Model Summary Information for Non-Significant Serial Mediation of CVO and Relationship Satisfaction (H6b)

	M_1 (Risk/Bene.)			M_2 (Breadth)			Y (Rel. Sat.)		
Antecedent	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
X (CVO)	.05	.04	.22	.44	.34	.20	.14	.06	.02
M_1	-	-	-	2.65	.53	.00	.34	.08	.00
M_2	-	-	-	-	-	-	.02	.01	.03
C_1 (Time)	.00	.00	.12	.04	.02	.01	.00	.00	.26
C_2 (Type)	.17	.04	.00	2.44	.43	.00	.27	.07	.00
Constant	3.28	.19	.00	2.69	2.46	.27	.66	.38	.09
	R^2 = .09 F (3, 326) = 10.11, p < .01			R^2 = .32 F (4, 325) = 25.69, p < .01			R^2 = .28 F (5, 324) = 20.01, p < .01		
	b = .00, SE = .00, LLCI = -.00, ULCI = .01								

Table 20

Regression Coefficients, Standard Errors, and Model Summary Information for Non-Significant Serial Mediation of CVO and Sexual Satisfaction (H6c)

	M_1 (Risk/Bene.)			M_2 (Depth)			Y (Sex. Sat.)		
Antecedent	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
X (CVO)	.05	.05	.22	.16	.05	.00	.09	.05	.10
M_1	-	-	-	.73	.00	.00	.30	.08	.00
M_2	-	-	-	-	-	-	.16	.05	.00
C_1 (Time)	.00	.00	.12	.01	.00	.01	-.00	.00	.75
C_2 (Type)	.18	.04	.00	.25	.05	.00	.06	.05	.31
Constant	3.28	.19	.00	-2.13	.29	.00	2.13	.39	.00
	R^2 = .09 F (3, 326) = 10.11, p < .01			R^2 = .44 F (4, 325) = 69.90, p < .01			R^2 = .19 F (5, 324) = 12.84, p < .01		
	b = .01, SE = .01, LLCI = -.00, ULCI = .02								

Table 21

Regression Coefficients, Standard Errors, and Model Summary Information for Non-Significant Serial Mediation of CVO and Sexual Satisfaction (H6d)

	M_1 (Risk/Bene.)			M_2 (Breadth)			Y (Sex. Sat.)		
Antecedent	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
X (CVO)	.05	.04	.22	.44	.34	.20	.11	.05	.04
M_1	-	-	-	2.65	.53	.00	.38	.07	.00
M_2	-	-	-	-	-	-	.01	.01	.16
C_1 (Time)	.00	.00	.12	.04	.02	.01	.00	.00	.93
C_2 (Type)	.17	.04	.00	2.44	.43	.00	.07	.06	.24
Constant	3.28	.19	.00	2.69	2.46	.27	1.75	.37	.00
	R^2 = .09 F (3, 326) = 10.11, p < .01			R^2 = .32 F (4, 325) = 25.69, p < .01			R^2 = .18 F (5, 324) = 10.36, p < .01		
	b = .00, SE = .00, LLCI = -.00, ULCI = .01								

Table 22

Regression Coefficients, Standard Errors, and Model Summary Information for Non-Significant Serial Mediation of CFO and Relationship Satisfaction (RQ7a)

	M_1 (Risk/Bene.)			M_2 (Depth)			Y (Rel. Sat.)		
Antecedent	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
X (CFO)	.01	.05	.87	.04	.07	.55	-.00	.08	.98
M_1	-	-	-	.74	.07	.00	.27	.09	.00
M_2	-	-	-	-	-	-	.19	.06	.00
C_1 (Time)	.00	.00	.11	.01	.00	.00	.00	.00	.31
C_2 (Type)	.18	.04	.00	.27	.05	.00	.29	.07	.00
Constant	3.40	.25	.00	-1.84	.39	.00	1.47	.48	.00
	R^2 = .09 F (3, 326) = 9.52, p < .01			R^2 = .42 F (4, 325) = 64.36, p < .01			R^2 = .27 F (5, 324) = 21.75, p < .01		
	b = .00, SE = .01, LLCI = -.01, ULCI = .02								

Table 23

Regression Coefficients, Standard Errors, and Model Summary Information for Non-Significant Serial Mediation of CFO and Relationship Satisfaction **(***RQ7b)*

	M_1 (Risk/Bene.)			M_2 (Breadth)			Y (Rel. Sat.)		
Antecedent	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
X (CFO)	.01	.05	.87	.15	.45	.74	.00	.08	.98
M_1	-	-	-	2.68	.52	.00	.35	.08	.00
M_2	-	-	-	-	-	-	.02	.01	.02
C_1 (Time)	.00	.00	.11	.05	.02	.01	.00	.00	.20
C_2 (Type)	.18	.04	.00	2.49	.42	.00	.28	.07	.00
Constant	3.40	.25	.00	3.35	3.21	.30	1.03	.47	.03
	R^2 = .09 F (3, 326) = 9.52, p < .01			R^2 = .32 F (4, 325) = 23.21, p < .01			R^2 = .26 F (5, 324) = 18.55, p < .01		
	b = .00, SE = .00, LLCI = -.01, ULCI = .01								

Table 24

Regression Coefficients, Standard Errors, and Model Summary Information for Non-Significant Serial Mediation of CFO and Sexual Satisfaction (RQ7c)

	M_1 (Risk/Bene.)			M_2 (Depth)			Y (Sex. Sat.)		
Antecedent	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
X (CFO)	.01	.05	.87	.04	.07	.55	.00	.08	.92
M_1	-	-	-	.74	.07	.00	.30	.08	.00
M_2	-	-	-	-	-	-	.18	.05	.00
C_1 (Time)	.00	.00	.11	.01	.00	.00	-.00	.00	.81
C_2 (Type)	.18	.04	.00	.27	.05	.00	.06	.06	.27
Constant	3.40	.25	.00	-1.84	.39	.00	2.37	.47	.00
	R^2 = .09 F (3, 326) = 9.52, p < .01			R^2 = .42 F (4, 325) = 64.36, p < .01			R^2 = .18 F (5, 324) = 12.32, p < .01		
				b = .00, SE = .01, LLCI = -.01, ULCI = .02					

Table 25

Regression Coefficients, Standard Errors, and Model Summary Information for Non-Significant Serial Mediation of CFO and Sexual Satisfaction (RQ7d)

	M_1 (Risk/Bene.)			M_2 (Breadth)			Y (Sex. Sat.)		
Antecedent	*b*	SE	*p*	*b*	SE	*p*	*b*	SE	*p*
X (CFO)	.01	.05	.87	.15	.45	.74	.01	.08	.87
M_1	-	-	-	2.68	.52	.00	.39	.07	.00
M_2	-	-	-	-	-	-	.01	.01	.13
C_1 (Time)	.00	.00	.11	.05	.02	.01	.00	.00	.82
C_2 (Type)	.18	.04	.00	2.49	.42	.00	.08	.06	.19
Constant	3.40	.25	.00	3.35	3.21	.30	2.00	.47	.00
	R^2 = .09 F (3, 326) = 9.52, p < .01			R^2 = .32 F (4, 325) = 23.21, p < .01			R^2 = .16 F (5, 324) = 9.26, p < .01		
				b = .00, SE = .00, LLCI = -.00, ULCI = .01					

Table 26

Moderation of the Effect of Gender on the Relationship Between Depth and Relationship Satisfaction (RQ9a)

	Rel. Sat. (Y)				
Antecedent	*b*	SE	*p*	LLCI	ULCI
Constant	2.96	.39	.00	2.19	3.72
Depth (X)	.02	.16	.89	-.30	.34
Gender (W)	-.47	.24	.05	-.94	.01
Depth x Gender (XW)	.17	.10	.08	-.02	.36
C_1 (Time)	.00	.00	.41	-.00	.01
C_2 (Type)	.32	.06	.00	.20	.44
	R^2 = .26, MSE = .73 F (5, 324) = 22.50, p < .01				

Table 27

Moderation of the Effect of Gender on the Relationship Between Breadth and Relationship Satisfaction (RQ9b)

	Rel. Sat. (Y)				
Antecedent	*b*	SE	*p*	LLCI	ULCI
Constant	3.42	.58	.00	2.67	4.56
Breadth (X)	-.02	.02	.43	-.07	.03
Gender (W)	-.94	.38	.01	-1.69	-.20
Breadth x Gender (XW)	.04	.02	.01	.01	.07
C_1 (Time)	.00	.00	.24	-.00	.01
C_2 (Type)	.32	.06	.00	.20	.44
	R^2 = .24, MSE = .75 F (5, 324) = 20.01, p < .01				

Table 28

Moderation of the Effect of Gender on the Relationship Between Depth and Sexual Satisfaction (RQ9c)

	Sex. Sat. (Y)				
Antecedent	*b*	SE	*p*	LLCI	ULCI
Constant	4.02	.34	.00	3.34	4.69
Depth (X)	.07	.14	.62	-.21	.35
Gender (W)	-.51	.21	.02	-.92	-.09
Breadth x Gender (XW)	.14	.08	.09	-.02	.31
C_1 (Time)	-.00	.00	.95	-.01	.00
C_2 (Type)	.09	.05	.09	-.01	.19
	R^2 = .17, MSE = .56 F (5, 324) = 13.13, p < .01				

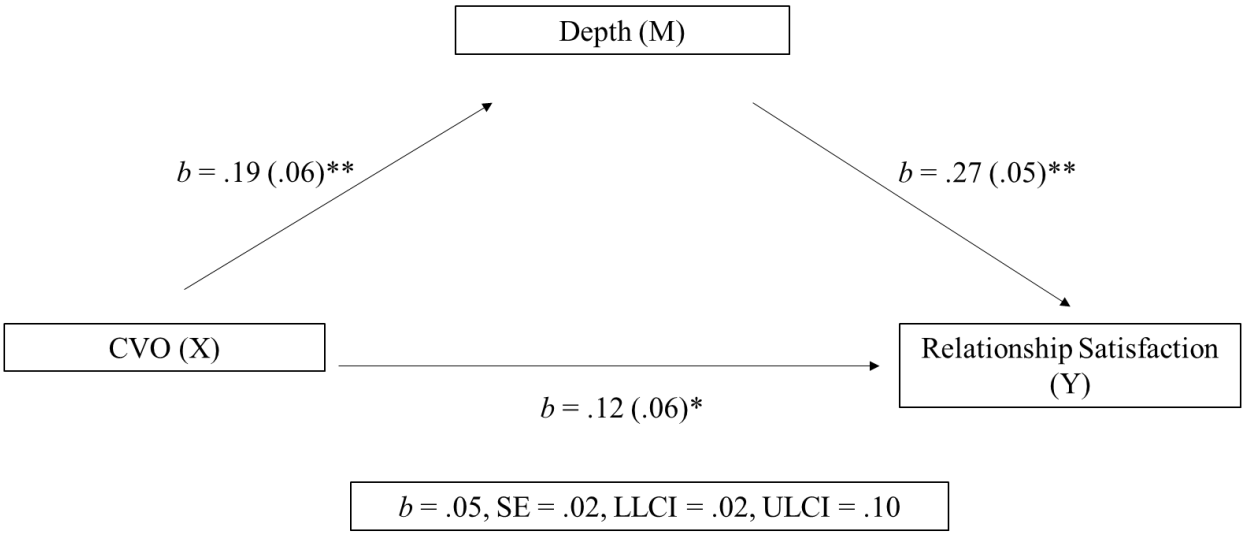
Table 29

Gender Did Not Interact with Breadth to Influence Sexual Satisfaction (RQ9d)

	Sex. Sat. (Y)				
Antecedent	*b*	SE	*p*	LLCI	ULCI
Constant	4.53	.52	.00	3.50	5.56
Breadth (X)	-.02	.02	.32	-.06	.02
Gender (W)	-.94	.34	.01	-1.60	-.27
Breadth x Gender (XW)	.03	.01	.02	.01	.06
C_1 (Time)	.00	.00	.61	-.00	.01
C_2 (Type)	.12	.06	.03	.01	.23
	R^2 = .11, MSE = .61 F (5, 324) = 7.94, p < .00				

Figure A

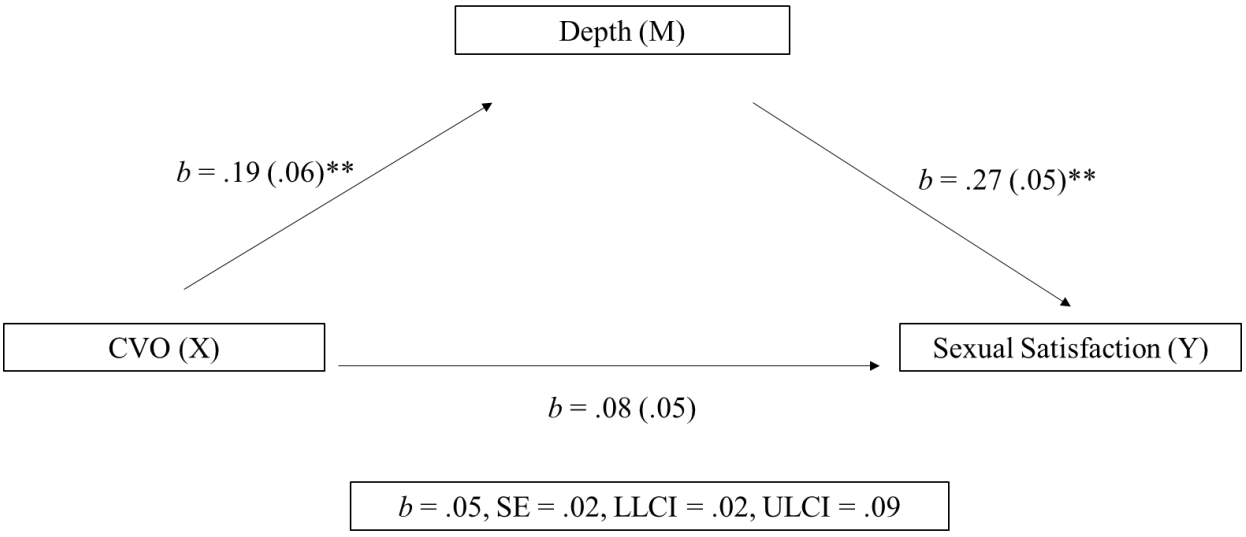
Disclosure Mediation Model
(H5a)



* Significant at the 0.05 level
** Significant at the 0.01 level

Figure B

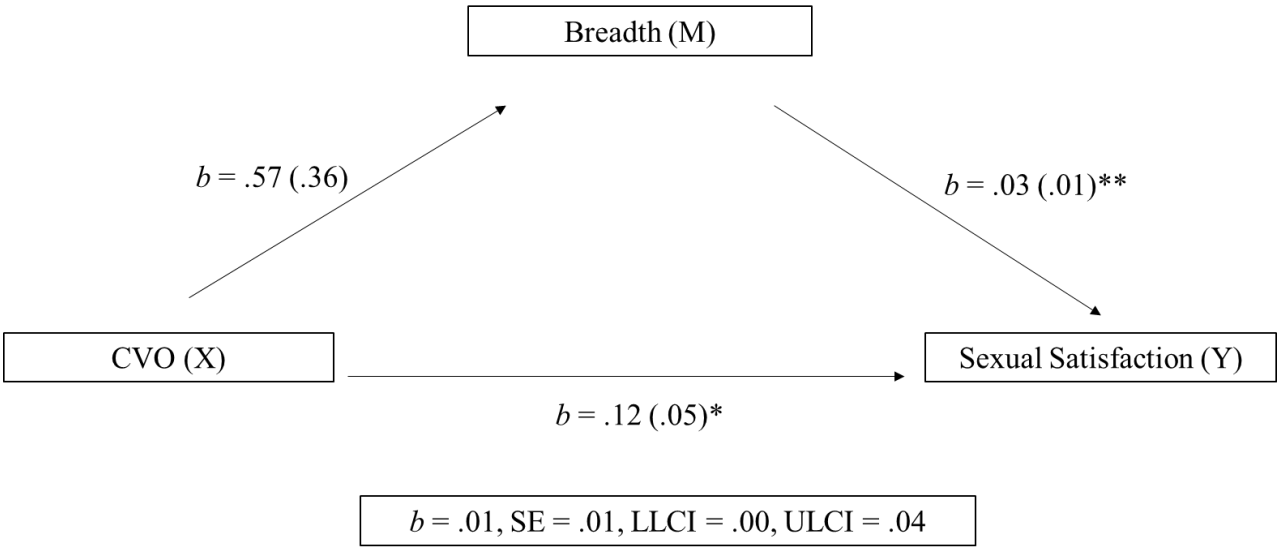
Disclosure Mediation Model
(H5b)



* Significant at the 0.05 level
** Significant at the 0.01 level

Figure C

Disclosure Mediation Model
(H5d)



* Significant at the 0.05 level
** Significant at the 0.01 level

Figure D

CVO and CFO as Predictors for Depth of SSD (RQ6a)

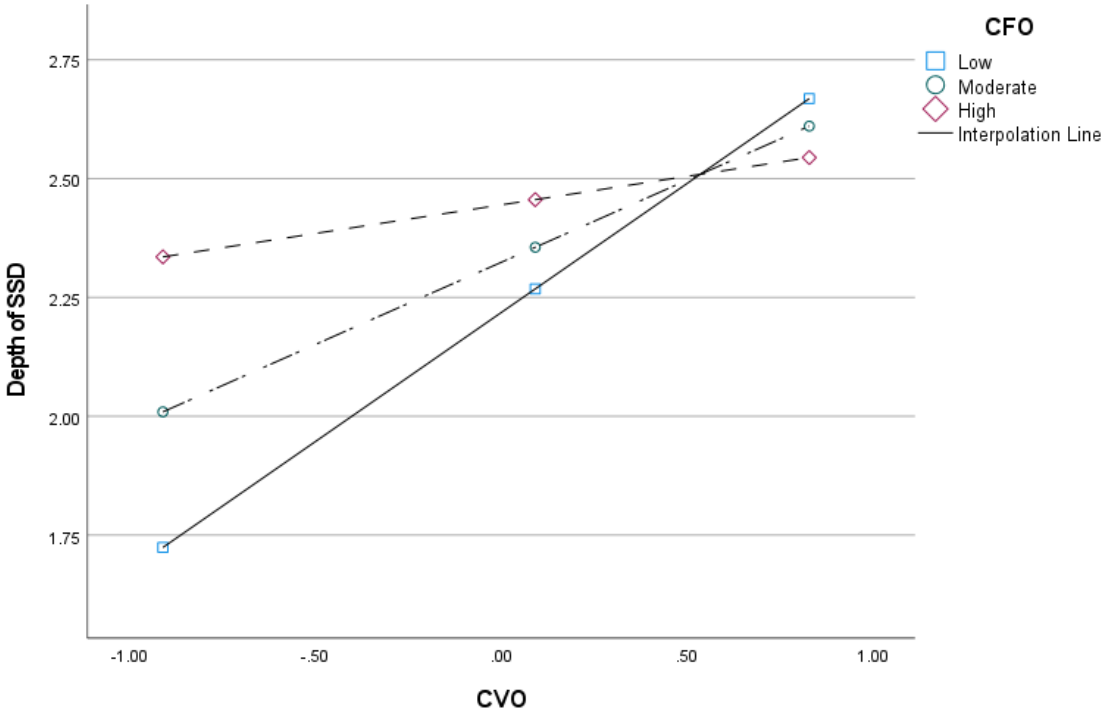
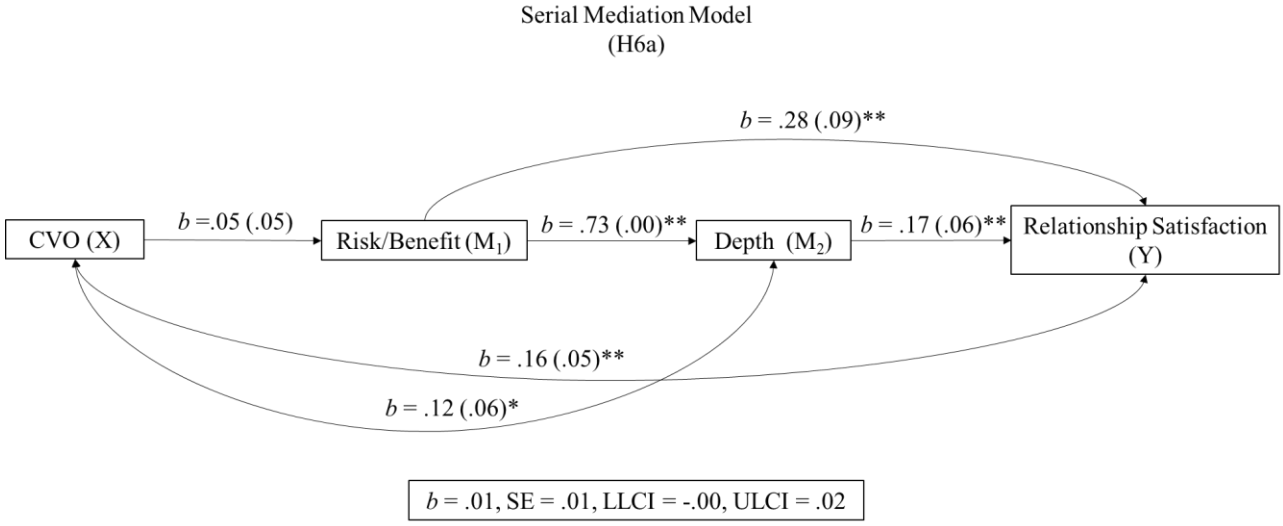


Figure E



* Significant at the 0.05 level
** Significant at the 0.01 level

Appendix A

Information Statement

Title: Family Communication and Sexual Self-Disclosure in Sexual Relationships

Key Information

- This project is studying family communication and disclosures about sex in sexual relationships.
- Your participation in this research project is completely voluntary.
- You will receive 5 points extra credit upon completion of this survey.
- Your participation will take approximately 25 minutes.
- You will be asked to do the following procedures: complete a survey. (More detailed information on procedures can be found below.)
- The content of the survey may cause mild discomfort when considering sex-related topics.
- Possible benefits from this research include a better understanding of what topics you have/have not communicated about in your sexual relationships and your perception of risks and benefits associated with those topics.
- Your alternative to participating in this research study is not to participate.

Introduction

The Department of Communication Studies at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to learn more about family communication and disclosures in sexual relationships about sex-related topics. This study will involve your completion of a survey. The survey will include questions that ask about your communication with your family, sex-related topics you have and have not discussed with a sexual partner, and the risks and benefits you associate with the discussion sex-related topics in your current or most recent sexual relationship. Your participation is expected to take approximately 25 minutes. The content of the survey may cause mild discomfort when considering the discussion of sex-related topics.

Although participation may not benefit you directly, we believe that the information gathered from this study will enhance understanding on the influence of family communication on disclosures in sexual relationships about sex-related topics.

Your participation is requested, although strictly voluntary. Your name will not be associated in any way with the research findings. Your identifiable information will not be shared unless (a) it is required by law or university policy, or (b) you give written permission. It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response. Your name is asked for only to correctly assign extra

credit. Once you have received your extra credit, your name and any other personal information will be deleted to maintain your privacy. IP addresses will not be collected.

For your participation, you can earn 5 points of extra credit in your Communication Studies course. If you choose to not participate or withdraw from this study, your grade will not be affected. You must complete the study and submit your name to receive extra credit.

Your identifiable information may be removed from the data collected during this project, and the de-identified data will be used for future research without additional consent from you.

If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.

Completion of the survey indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email irb@ku.edu.

Sincerely,

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Appendix B

Sample Survey

Directions: Please answer each of the following questions.

1. What is your age? _____
2. I am …
    a. Male
    b. Female
    c. Non-binary
    d. Other_____
    e. Prefer not to say
3. Are you an international student?
    a. If yes, what country?
    b. If no, skip to 4
4. What is your race/ethnicity? Check all that apply.
    a. American Indian or Alaska Native
    b. Asian
    c. Black or African American
    d. Hispanic or Latino
    e. Native Hawaiian or Other Pacific Islander
    f. White
    g. Other_____
    h. Prefer not to say
5. To what degree do you consider yourself to be a religious person?
    a. Not religious
    b. Slightly religious
    c. Moderately religious
    d. Very religious
6. Have you ever engaged in sexual behavior (e.g., oral sex, vaginal sex, anal sex, mutual masturbation, etc.)?
    a. Yes (Skip to 7)
    b. No (Leave survey)
7. How many different partners have you had sex within the past 12 months?
    a. 0
    b. 1
    c. 2
    d. 3
    e. 4
    f. 5 – 6
    g. 7 – 9
    h. 10 – 19
    i. 20 or more

If answered "No" to #6 or "0" to #7: Thank you for your interest in this study, unfortunately, you do not meet the criteria and your participation has concluded.

Directions: Please consider a person with whom you have had a **sexual relationship** in the last year. This person you could be currently in a relationship with or previously in a relationship with.

For the purpose of this study a sexual relationship is defined as a relationship in which oral sex, vaginal sex, anal sex, or mutual masturbation has occurred. Keep this same partner in mind for all of the following questions.

1. Was this relationship sexually active (e.g., you currently engage/have engaged in sexual activities such as oral sex, vaginal sex, anal sex, or mutual masturbation)?
    a. Yes
    b. No
2. Your current/previous sexual partner is/was:
    a. Male
    b. Female
    c. Non-binary
    d. Other _____
    e. Prefer not to say
3. Are you currently still in this relationship?
    a. Yes
    b. No
4. If you are no longer in this relationship, how many months ago did you stop seeing each other?
    a. _____ Months
5. What is/was the best description of your relationship?
    c. One-night stand
    d. Hook-up partner (e.g., friends with benefits, on-again/off-again)
    e. Dating non-exclusively
    f. Dating exclusively (e.g., partner, boyfriend, girlfriend)
    g. Engaged
    h. Married
6. How long has/did this relationship with this partner lasted in total?
    i. Years: Months:

If answered "No" to #1 or more than 12 months to #4: Thank you for your interest in this study, unfortunately, you do not meet the criteria and your participation has concluded.

Directions: For the following statements, consider sex-related communication that has occurred between you and most recent sexual partner (i.e., current or previous). Please keep the same

sexual partner in mind for all of the following questions. Select the extent to which you have discussed each topic below.

Repeat: REMEMBER TO KEEP YOUR MOST RECENT SEXUAL PARTNER IN MIND WHEN ANSWERING

1. What I enjoy most about sex.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

2. My sexual preferences about vaginal sex.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

3. My sexual preferences about anal sex.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

4. My sexual preferences about oral sex.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

5. My feelings about using condoms.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

6. My feelings about birth control.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

7. My sexual satisfaction.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

8. The extent to which I believe sex is an important part of a relationship.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

9. My views on the role of sex in the relationship.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

10. My concerns about preventing STIs.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

11. My sexual thoughts or fantasies.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

12. My sexual health history.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

13. The number of partners I have had.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

14. My previous sexual behaviors.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

15. My views concerning relationship exclusivity (e.g., whether or not I or my partner may engage in sexual activity with others).

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

16. My personal views on sexual morality.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

17. What about sex makes me anxious.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

18. The aspects of sex that I don’t like.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

19. My feelings about masturbation.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

20. Sexual problems or difficulties I may have.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

21. My feelings about the use of pornography.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

22. My thoughts on faking an orgasm.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

23. My kissing preferences or techniques.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

24. My feelings about sexting.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

25. How I think sex should be started.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

26. My thoughts about the frequency of sex.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

27. What to say or do when I want to turn down (saying no to) sex.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

28. My feelings about the expression of affection during sexual activity.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

29. My thoughts about the duration of sex.

Have Not Discussed	Have Slightly Discussed	Have Somewhat Discussed	Have Moderately Discussed	Have Fully Discussed

Directions: For the following statements, consider your feelings about talking with your most recent sexual partner (i.e., current or previous) about each sex-related topic. Please keep the same sexual partner in mind for all of the following questions. Select the extent to which you feel the topic is risky and/or beneficial to discuss with your sexual partner.

1. What I enjoy most about sex.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

2. My sexual preferences about vaginal sex.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

3. My sexual preferences about anal sex.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

4. My sexual preferences about oral sex.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

5. My feelings about using condoms.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

6. My feelings about birth control.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

7. My sexual satisfaction.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

8. The extent to which I believe sex is an important part of a relationship.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

9. My views on the role of sex in the relationship.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

10. My concerns about preventing STIs.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

11. My sexual thoughts or fantasies.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

12. My sexual health history.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

13. The number of partners I have had.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

14. My past sexual behaviors.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

15. My views concerning relationship exclusivity (e.g., whether or not I or my partner may engage in sexual activity with others).

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

16. My personal views on sexual morality.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

17. What about sex makes me anxious.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

18. The aspects of sex that I don't like.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

19. My feelings about masturbation.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

20. Sexual problems or difficulties I may have.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

21. My feelings about the use of pornography.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

22. My thoughts on faking an orgasm.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

23. My kissing preferences or techniques.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

24. My feelings about sexting.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

25. How I think sex should be started.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

26. My thoughts about the frequency of sex.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

27. What to say or do when I want to turn down (saying no to) sex.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

28. My feelings about the expression of affection during sexual activity.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

29. My thoughts about the duration of sex.

Risky	More Risky than Beneficial	Equally Risky and Beneficial	More Beneficial than Risky	Beneficial

Directions: Consider your sexual relationship with most recent sexual partner (i.e., current or previous). Please keep the same sexual partner in mind for all of the following questions. Select the extent to which you agree or disagree with the statements below.

1. My partner is able to bring me to orgasm when we have sex.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. My partner is good at getting me sexually aroused.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I can rely on my partner to know what makes me feel good.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. I am satisfied with the sex life I have with my partner.

Strongly Disagree Disagree Neutral Agree Strongly Agree

5. My partner makes me feel sexually attractive.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Directions: Consider your relationship with your most recent sexual partner (i.e., current or previous). Please keep the same sexual partner in mind for all of the following questions. Select the extent to which you agree or disagree with the statements below.

1. I am satisfied with the attention my partner pays to me.

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I feel that my partner cares about me.

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. My partner shows me the affection I need.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. I feel appreciated by my partner.

Strongly Disagree Disagree Neutral Agree Strongly Agree

5. When I am sad or worried, my partner is interested in what is happening to me.

Strongly Disagree Disagree Neutral Agree Strongly Agree

6. My partner is available when I need them.

Strongly Disagree Disagree Neutral Agree Strongly Agree

7. I am excited with my couple relationship.

Strongly Disagree Disagree Neutral Agree Strongly Agree

8. I feel that my partner loves me as much as I do.

Strongly Disagree Disagree Neutral Agree Strongly Agree

9. I feel understood by my partner.

Strongly Disagree Disagree Neutral Agree Strongly Agree

10. My partner is interested in what I do in my day.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Directions: For the following statements, consider your communication with your parents during adolescence (i.e., middle school and high school). Please select the degree to which you agree or disagree with the following statements.

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

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. My parents often say something like “Every member of the family should have some say in family decisions.”

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. My parents often ask my opinion when the family is talking about something.

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. My parents encourage me to challenge their ideas and beliefs.

Strongly Disagree Disagree Neutral Agree Strongly Agree

5. My parents often say something like “You should always look at both sides of an issue.”

Strongly Disagree Disagree Neutral Agree Strongly Agree

6. I usually tell my parents what I am thinking about things.

Strongly Disagree Disagree Neutral Agree Strongly Agree

7. I can tell my parents almost anything.

Strongly Disagree Disagree Neutral Agree Strongly Agree

8. In our family we often talk about our feelings and emotions.

Strongly Disagree Disagree Neutral Agree Strongly Agree

9. My parents and I often have long, relaxed conversations about nothing in particular.

Strongly Disagree Disagree Neutral Agree Strongly Agree

10. I really enjoy talking with my parents, even when we disagree.

Strongly Disagree Disagree Neutral Agree Strongly Agree

11. My parents like to hear my opinions, even when they don’t agree with me.

Strongly Disagree Disagree Neutral Agree Strongly Agree

12. My parents encourage me to express my feelings.

Strongly Disagree Disagree Neutral Agree Strongly Agree

13. My parents tend to be very open about their emotions.

Strongly Disagree Disagree Neutral Agree Strongly Agree

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

Strongly Disagree Disagree Neutral Agree Strongly Agree

15. In our family we often talk about our plans and hopes for the future.

Strongly Disagree Disagree Neutral Agree Strongly Agree

16. My parents expect us to respect our elders.

Strongly Disagree Disagree Neutral Agree Strongly Agree

17. In our home, I am expected to speak respectfully to my parents.

Strongly Disagree Disagree Neutral Agree Strongly Agree

18. My parents have clear expectations about how a child is supposed to behave.

Strongly Disagree Disagree Neutral Agree Strongly Agree

19. When I am home, I am expected to obey my parents' rules.

Strongly Disagree Disagree Neutral Agree Strongly Agree

20. My parents insist that I respect those who have been placed in positions of authority,

Strongly Disagree Disagree Neutral Agree Strongly Agree

21. My parents emphasize certain attitudes that they want the children in our family to adopt.

Strongly Disagree Disagree Neutral Agree Strongly Agree

22. In our home, my parents have the last word.

Strongly Disagree Disagree Neutral Agree Strongly Agree

23. My parents expect me to trust their judgement on important matters.

Strongly Disagree Disagree Neutral Agree Strongly Agree

24. I am expected to follow my parents' wishes.

Strongly Disagree Disagree Neutral Agree Strongly Agree

25. My parents feel it is important to be the boss.

Strongly Disagree Disagree Neutral Agree Strongly Agree

26. My parents become irritated with my views if they are different from their views.

Strongly Disagree Disagree Neutral Agree Strongly Agree

27. My parents try to persuade me to view things the way they see them.

Strongly Disagree Disagree Neutral Agree Strongly Agree

28. My parents say things like "You'll know better when you grow up."

Strongly Disagree Disagree Neutral Agree Strongly Agree

29. My parents say things like "You may not understand why we are doing this right now, but someday you will."

Strongly Disagree Disagree Neutral Agree Strongly Agree

30. My parents say things like “My ideas are right, and you should not question them.”

Strongly Disagree Disagree Neutral Agree Strongly Agree

31. In my family, family members are expected to hold similar values.

Strongly Disagree Disagree Neutral Agree Strongly Agree

32. I am expected to adopt my parents’ views.

Strongly Disagree Disagree Neutral Agree Strongly Agree

33. My parents encourage me to adopt their values.

Strongly Disagree Disagree Neutral Agree Strongly Agree

34. Our family has a particular way of seeing the world.

Strongly Disagree Disagree Neutral Agree Strongly Agree

35. I feel pressure to adopt my parents’ beliefs.

Strongly Disagree Disagree Neutral Agree Strongly Agree

36. I am expected to challenge my parents’ beliefs. (R)

Strongly Disagree Disagree Neutral Agree Strongly Agree

37. In our home, we are allowed to question my parents’ authority. (R)

Strongly Disagree Disagree Neutral Agree Strongly Agree

38. My parents encourage open disagreement. (R)

Strongly Disagree Disagree Neutral Agree Strongly Agree

39. In our home, we are encouraged to question my parents’ authority. (R)

Strongly Disagree Disagree Neutral Agree Strongly Agree

Thank you for your help with this research!

Appendix C

Revised Family Communication Patterns Instrument (RFCP)

All items were measured on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*).

Conversation Orientation Subscale (15 items)

1. In our family we often talk about topics like politics and religion where some persons disagree with others.
2. My parents often say something like "Every member of the family should have some say in family decisions."
3. My parents often ask my opinion when the family is talking about something.
4. My parents encourage me to challenge their ideas and beliefs.
5. My parents often say something like "You should always look at both sides of an issue."
6. I usually tell my parents what I am thinking about things.
7. I can tell my parents almost anything.
8. In our family we often talk about our feelings and emotions.
9. My parents and I often have long, relaxed conversations about nothing in particular.
10. I really enjoy talking with my parents, even when we disagree.
11. My parents like to hear my opinions, even when they don't agree with me.
12. My parents encourage me to express my feelings.
13. My parents tend to be very open about their emotions.
14. We often talk as a family about things we have done during the day.
15. In our family we often talk about our plans and hopes for the future.

Expanded Conformity Orientation Scale (ECOS)

All items were measured on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*).

Conformity Orientation Dimensions (24 items)

Dimension 1: Respecting parental authority

1. My parents expect us to respect our elders.
2. In our home, I am expected to speak respectfully to my parents.
3. My parents have clear expectations about how a child is supposed to behave.
4. When I am home, I am expected to obey my parents' rules.
5. My parents insist that I respect those who have been placed in positions of authority,
6. My parents emphasize certain attitudes that they want the children in our family to adopt.
7. In our home, my parents have the last word.
8. My parents expect me to trust their judgement on important matters.
9. I am expected to follow my parents' wishes.

Dimension 2: Experiencing parental control

10. My parents feel it is important to be the boss.

11. My parents become irritated with my views if they are different from their views.
12. My parents try to persuade me to view things the way they see them.
13. My parents say things like "You'll know better when you grow up."
14. My parents say things like "You may not understand why we are doing this right now, but someday you will."
15. My parents say things like "My ideas are right, and you should not question them."

Dimension 3: Adopting parents' values/beliefs

16. In my family, family members are expected to hold similar values.
17. I am expected to adopt my parents' views.
18. My parents encourage me to adopt their values.
19. Our family has a particular way of seeing the world.
20. I feel pressure to adopt my parents' beliefs.

Dimension 4: Questioning parents' beliefs/authority

21. I am expected to challenge my parents' beliefs. (R)
22. In our home, we are allowed to question my parents' authority. (R)
23. My parents encourage open disagreement. (R)
24. In our home, we are encouraged to question my parents' authority. (R)

Sexual Self-Disclosure Scale

All items were measured on a 5-point Likert scale (0 = *have not discussed*; 4 = *have fully discussed*).

1. What I enjoy most about sex (Brown & Weigel, 2018; Snell et al., 1989).
2. My sexual preferences about vaginal sex (Brown & Weigel, 2018; La France, 2019).
3. My sexual preferences about anal sex (Brown & Weigel, 2018; La France, 2019).
4. My sexual preferences about oral sex (Brown & Weigel, 2018; La France, 2019; Snell et al., 1989).
5. My feelings about using condoms (Brown & Weigel, 2018; La France, 2019; Snell et al., 1989).
6. My feelings about birth control (Brown & Weigel, 2018; La France, 2019; Snell et al., 1989).
7. My sexual satisfaction (Brown & Weigel, 2018; Snell et al., 1989).
8. The extent to which I believe sex is an important part of a relationship (Brown & Weigel, 2018; Snell et al., 1989).
9. My views on the role of sex in the relationship (Brown & Weigel, 2018; La France, 2019; Snell et al., 1989).
10. My concerns about preventing STIs (Brown & Weigel, 2018; Snell et al., 1989).
11. My sexual thoughts or fantasies (Brown & Weigel, 2018; La France, 2019; Snell et al., 1989).
12. My sexual health history (Brown & Weigel, 2018; Snell et al., 1989).
13. The number of partners I have had (La France, 2019).

14. My past sexual behaviors (Brown & Weigel, 2018; La France, 2019; Snell et al., 1989).
15. My views concerning relationship exclusivity (e.g., whether or not I or my partner may engage in sexual activity with others) (Brown & Weigel, 2018; La France, 2019; Snell et al., 1989).
16. My personal views on sexual morality (Brown & Weigel, 2018; Snell et al., 1989).
17. What about sex makes me anxious (Brown & Weigel, 2018; La France, 2019; Snell et al., 1989).
18. The aspects of sex that I don't like (La France, 2019).
19. My feelings about masturbation (Brown & Weigel, 2018).
20. Sexual problems or difficulties I may have (Brown & Weigel, 2018; Snell et al., 1989).
21. My feelings about the use of pornography (Brown & Weigel, 2018; La France, 2019).
22. My thoughts on faking an orgasm (La France, 2019; Snell et al., 1989).
23. My kissing preferences or techniques (La France, 2019).
24. My feelings about sexting (La France, 2019).
25. How I think sex should be started (La France, 2019).
26. My thoughts about the frequency of sex (La France, 2019).
27. Time when I want to turn down (saying no to) sex (La France, 2019; Snell et al., 1989).
28. My feelings about the expression of affection during sexual activity (La France, 2019; Snell et al., 1989).
29. My thoughts about the duration of sex (La France, 2019).

Risk/Benefit Scale

All items were measured on a 5-point Likert scale (1 = *risky*, 2 = *more risky than beneficial*, 3 = *equally risky and beneficial*, 4 = *more beneficial than risky*, 5 = *beneficial*).

1. What I enjoy most about sex.
2. My sexual preferences about vaginal sex.
3. My sexual preferences about anal sex.
4. My sexual preferences about oral sex.
5. My feelings about using condoms.
6. My feelings about birth control.
7. My sexual satisfaction.
8. The extent to which I believe sex is an important part of a relationship.
9. My views on the role of sex in the relationship.
10. My concerns about preventing STIs.
11. My sexual thoughts or fantasies.
12. My sexual health history.
13. The number of partners I have had.
14. My past sexual behaviors.
15. My views concerning relationship exclusivity (e.g., whether or not I or my partner may engage in sexual activity with others).
16. My personal views on sexual morality.
17. What about sex makes me anxious.

18. The aspects of sex that I don't like.
19. My feelings about masturbation.
20. Sexual problems or difficulties I may have.
21. My feelings about the use of pornography.
22. My thoughts on faking an orgasm.
23. My kissing preferences or techniques.
24. My feelings about sexting.
25. How I think sex should be started.
26. My thoughts about the frequency of sex.
27. Time when I want to turn down (saying no to) sex.
28. My feelings about the expression of affection during sexual activity.
29. My thoughts about the duration of sex.

Sexual Satisfaction Scale

All 5 items were measured on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*).

1. My partner is able to bring me to orgasm when we have sex.
2. My partner is good at getting me sexually aroused.
3. I can rely on my partner to know what makes me feel good.
4. I am satisfied with the sex life I have with my partner.
5. My partner makes me feel sexually attractive.

Satisfaction with Couple Relationship Scale (SCR)

All 10 items were measured on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*).

1. I am satisfied with the attention my partner pays to me.
2. I feel that my partner cares about me.
3. My partner shows me the affection I need.
4. I feel appreciated by my partner.
5. When I am sad or worried, my partner is interested in what is happening to me.
6. My partner is available when I need her/him.
7. I am excited with my couple relationship.
8. I feel that my partner loves me as much as I do.
9. I feel understood by my partner.
10. My partner is interested in what I do in my day.