

Self-Disclosure of Sexual Desires as a Decision-Making Process

Benjamin L. Compton

A dissertation

submitted in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

University of Washington

2023

Reading Committee:

Valerie Manusov, Chair

Amanda Denes

Mako Hill

Program Authorized to Offer Degree:

Communication

University of Washington

Abstract

Self-Disclosure of Sexual Desires as a Decision-Making Process

Benjamin L. Compton

Chair of the Supervisory Committee:

Valerie Manusov

Department of Communication

Sexual self-disclosures involve individuals revealing or discussing their beliefs, attitudes, or desires about sexual topics (Byers & Demmons; Harris et al., 2014). To learn more about this process, this dissertation applied the Disclosure Decision-making Model (Greene, 2009) to self-disclosures of sexual desires with current partners. Participants ($N = 326$) completed an online survey that examined variables related to information assessment, receiver assessment, discloser efficacy, and message preparation. Using structural equation modeling, these factors predicted the likelihood of future disclosure and specific messages that individuals might use in the future if they had not disclosed previously. It also modeled the predictor variables with the same message forms used by those who had disclosed their sexual desires to their current partners. Among other findings, the primary factors that appeared to vary for those who had not disclosed and those who had were anticipated response and perceptions of partners' sexual communal

strength. The results showed that individuals were much more likely to use verbal than nonverbal messages when disclosing and, if disclosing, reported use of more direct than indirect forms. For those who disclosed, use of nonverbal messages was predicated on anticipated response and message preparation. Implications for interpersonal sexual communication and sex therapy are discussed.

©Copyright 2023

Benjamin L. Compton

Acknowledgments

I'd first like to thank Dr. Valerie Manusov for advising me, being kind yet still challenging my growth, and providing the right amount of patience for me through my four years. It's a blessing to have an advisor that is simply a pleasant and caring person. I am honored that I was able to be one of your final PhD students. A beautiful and successful career, and I got to experience the accumulation of it all.

To my committee, I appreciate you all taking the time to see this project through. Dr. Denes, for years we kept telling each other that we would work together, and I am happy it finally came to fruition. I don't expect this will be our last project together. To Dr. Hill, thank you for your patience as I struggled my way through the statistical analyses. Since my first day at UW taking Com 500 with you, I always knew you were a brilliant mind, so thank you for guiding me through some of the most confusing and difficult times of my graduate career.

To Dr. Schwartz and Dr. Nichols, thank you both for taking the time to be a part of this project. We each approach sex and sexuality from different angles and disciplines, but we all agree of the importance of these vital yet understudied topics. In addition, thank you to Dr. Sanders, who's statistical advising helped me for being completely in the dark.

To the Bowmanizer, who started me on my academic journey over 10 years ago, thank you for always encouraging me, providing off-the-record insight, and giving advice that I usually take (or regret not taking later). I have always joked that one day I want to be you (i.e., have your career only, you know I party too hard to truly be you), so this is just one step closer. You won a pedagogy award; I won a pedagogy award. You got a first job in Boston; I got a first job in Boston. You got a tenure-track job at USD; I got...look out – I am coming from your spot at USD.

Table of Contents

	Page
Acknowledgements.....	5
List of Tables and Figures.....	7
 Chapters	
1. Introduction.....	8
Self-Disclosure of Sexual Desires.....	14
The Disclosure Decision-Making Model.....	19
Hypothesized Models.....	26
2. Methods.....	33
Information Assessment Items.....	38
Receiver Assessment Items.....	40
Discloser Efficacy Items.....	44
Message Preparation Items.....	45
3. Data Analysis and Results.....	52
Exploratory Results.....	54
Undisclosed Likelihood of Disclosure.....	56
Undisclosed Likelihood of Message Directness and Channel.....	60
Disclosed Message Forms.....	67
4. Discussion.....	76
Assessing Applications of the Disclosure Decision-Making Model.....	78
Assessing this Study’s Undisclosed and Disclosed Models.....	82
Assessments of Disclosure Message Form Use.....	91
Application of Findings.....	96
Conclusion.....	103
 Appendices	
A. Recruitment Script (MTurk & University).....	105
B. Research Participant Online Consent Form.....	107
C. Risk and Privacy Statement.....	109
D. SEM Data Results Output.....	110
 References.....	 164

List of Tables and Figures

	Page
Figure 1: Predicted Path Model for Likelihood to Disclose for the Undisclosed.....	29
Figure 2: Predicted Path Model for Likelihood for Direct Message Forms for the Undisclosed.....	29
Figure 3: Predicted Path Model for Use of Message Forms for the Disclosed.....	31
Table 1: Zero-Order Correlation Matrix for All Undisclosed Variables.....	52
Table 2: Zero-Order Correlation Matrix for All Disclosed Variables.....	53
Figure 4: Results for SEM for Likelihood to Disclose for the Undisclosed.....	59
Table 3: Significant Findings for Likelihood to Disclose for the Undisclosed.....	60
Figure 5a: Results for SEM for Likelihood to Use Direct-verbal Messages for the Undisclosed.....	62
Figure 5b: Results for SEM for Likelihood to Use Indirect-verbal Messages for the Undisclosed.....	63
Figure 5c: Results for SEM for Likelihood to Use Direct-nonverbal Messages for the Undisclosed.....	65
Figure 5d: Results for SEM for Likelihood to Use Indirect-nonverbal Messages for the Undisclosed.....	66
Table 4: Significant Findings for Likelihood of Message Forms for the Undisclosed.....	67
Figure 6a: Results for SEM for Use of Direct-verbal Messages for the Disclosed.....	70
Table 5: Significant Findings for DD-MM Phases for the Disclosed.....	71
Figure 6b: Results for SEM for Use of Indirect-verbal Messages for the Disclosed.....	72
Figure 6c: Results for SEM for Use of Direct-nonverbal Messages for the Disclosed.....	73
Figure 6d: Results for SEM for Use of Indirect-nonverbal Messages for the Disclosed.....	74
Table 6: Significant Findings for the Use of Message Forms for the Disclosed.....	75

Chapter One

Self-Disclosure of Sexual Desires as a Decision-Making Process

Self-disclosure is the process through which individuals reveal information about themselves to at least one other person (Greene et al., 2006; Petronio, 2002; Reiss, 1986). It is fundamental for close relationships (Hastings, 2000) in that self-disclosure allows people to deepen their relationships by revealing intimate information in the early stages (Derlega & Grzelak, 1979; Littlejohn & Foss, 2008; Masaviru, 2016), and it serves an important role in relational maintenance in part by increasing satisfaction in ongoing relationships (Coffelt & Hess, 2014; Montesi et al., 2010; Rosenfeld & Kendrick, 1984; Wheelless et al., 1984). For Reiss (1986), self-disclosure is a *relational requirement* equivalent to physical touch and a sense of connection.

At the same time, disclosing can be risky for individuals and for their relationships. Disclosing personal failures, for example, can result in higher levels of stress or anxiety in the discloser (Cameron et al., 2009), which might lead to dissolution of the relationship the discloser has with the person to whom they disclosed (Pennington, 2020). Self-disclosure of physical (Evangeli & Wroe, 2017) or mental (Brohan et al., 2012) health conditions or stigmatized behavior (Jaspal & Cinnirella, 2012) can threaten the discloser's identity and the course of a relationship. Even the fear of rejection based on the content of a disclosure have negative outcomes for a would-be discloser (Murray et al., 2006).

As such, self-disclosure, though viewed broadly as relationally and personally positive, also has a range of potential negative outcomes. It therefore provides an example of what Spitzberg and Cupach (2007) refer to as the functional ambivalence of interpersonal communication: that interpersonal communication can be understood through both its moral

assumptions (good/bad) and its functionality (helpful/harmful). Specifically, certain behaviors might be perceived typically as productive, and thus pro-social, but there can be times where engaging in the behavior can be harmful or destructive (i.e., anti-social).

One example of where disclosing might be functionally ambivalent is when people reveal information about sexual topics. Sexual self-disclosure involves discussing one's sexual attitudes or experiences (Byers & Demmons, 1999). People might disclose an assortment of sexual topics, including sexual history, health, or affect (Coffelt & Hess, 2015). One of the most ambivalent – and challenging – topics is sexual desires (Anderson et al., 2011). But talking about it is important: Reiss (1986) asserted that human sexuality is “a societal product whose importance lies more in its physical pleasure and self-disclosure aspects than in its reproductive potential” (p. 233). Manning (2021) likewise proposed that sexual behavior is itself a communicative act. In this view, sexuality is more than just to whom one is attracted and how they enact that attraction. It is also about acknowledging what sorts of behavior or action one finds arousing.

Given its functional ambivalence, however, people may have to decide whether or not to talk to others about their sexual desires. Examining the process of decision-making assessment for self-disclosure of sexual desires to a partner can help create a greater understanding of the way that people balance potential personal and relational concerns against exploring and fulfilling sexual desires. Whereas research has been conducted on the cultural discourses around sexuality (Manning, 2014), few studies focus on what happens between individuals in discussion of sexual interactions (Manning, 2013, 2021).

Just as with self-disclosure more broadly, there are a range of benefits to talking about sexual desires or preferences in relationships. For instance, when individuals disclose their sexual desires, partners are better able to enact the desired behaviors, which tends to lead to

higher satisfaction for the discloser (Byers & Demmons, 1999). Self-disclosure of sexual desires has also been found to strengthen established relationships through increased relational closeness (Metts & Cupach, 1989). The *amount* that people disclose about their sexual preferences has been found to be linked with their sexual communicative (Byers et al., 1998; Coffelt & Hess, 2014; MacNeil & Byers, 2005, 2009; Montesi et al., 2010; Rehman et al., 2011) and relational (Brown & Weigel, 2018; Mallory, 2022; Merwin et al., 2017) satisfaction. As well, individuals who are more open to self-disclosure of sexual desires also tend to have increased sexual arousal and higher frequencies of orgasm (Haavio-Mannila & Kontula, 1997; Huberle, 1991).

Given the functional ambivalence of such disclosures, however, there are potential negative ramifications of disclosing sexual desires. As with other challenging topics, disclosing sexual desires has the potential to threaten a relationship (Theiss, 2011) and/or the discloser's positive identity (Derlega et al., 2004). Disclosures of certain sexual desires can lead to isolation, feelings of depression, low levels of self-esteem, or humiliation or ridicule (Bezreh et al., 2012; Brown, 2010). Discussing sex has also been linked with sexual shaming (Gunning et al., 2020) and jealousy or embarrassment (Anderson et al., 2011) due, in part, to the potential social stigma associated with certain sexual preferences (Pitagora, 2019). All of this can lead to lack of comfort discussing sexual topics, which has been correlated with both lower relational and sexual satisfaction (Rubinsky & Hosek, 2020).

The complexity, emotionality, and sensitivity related to human sexual interaction can make talking about sex – in any form – challenging. As such, and despite the potential benefits, many people “do not communicate...about sexuality even when it is important to do so” (Byers, 2011, p. 20). *Not* engaging in sexual communication (or engaging in ineffective ways), however, can also result in negative outcomes, including poorer sexual health and lower well-being

(Byers, 2011; Montesi et al., 2013). Given both the challenges of disclosing and of not disclosing, and the potential costs and benefits of doing so, people may weigh their desire to disclose and the benefits that it can bring alongside its possible negative ramifications.

Because self-disclosure is typically volitional (Allen, 1974; Tilton-Weaver et al., 2013), individuals often have to decide whether to disclose their sexual desires to their partners. In such cases, self-disclosure about sexual desires is a product of decision-making, a process in which individuals weigh the risks and benefits of whether to disclose to another and, if they do choose to disclose, how they might best do so (Fisher, 1986). In other words, individuals are faced with the task of deciding *if* they should disclose or not as well as *how* they might go about disclosing. This dissertation explores these process, and it does so as a specific response to Manning's (2021) call for more research on interpersonal sexual communication by highlighting the importance of decision-making for disclosing sexual desires. The findings should provide insight into how individuals manage the most intimate aspects of their lives – their sexual desires – and offer a clearer vision of the communication that can stem from the factors involved in such decision-making.

In particular, this dissertation applied the Disclosure Decision-making Model (DD-MM) (Greene, 2009) to what goes through people's minds as they decide whether or not to disclose to a partner about their sexual desires. The model also offers ways to predict how they may enact their decision communicatively if they choose (or have chosen) to disclose. The DD-MM was intended originally for the disclosure decision-making process of non-visible health diagnoses (Lee & Greene, 2023). But just as with these forms of health diagnoses, sexual desires are typically invisible or private until individuals decide to reveal them to others. As such, this model is particularly applicable, as in the DD-MM, decision-making is embedded in a risk

assessment of unknown outcomes (Greene, 2012). That is, there is uncertainty at the basis of both forms of disclosure.

Consistent with the DD-MM, and given the benefits and risks of self-disclosing sexual desires (Plummer, 1975), individuals might weigh multiple factors during their choice-making process. The DD-MM provides a framework in which individuals assess uncertainty around the message itself, how the potential recipient might decode the message, and their own efficacy and ability to encode the message. The goal of this dissertation is to use the DD-MM to better understand the decision-making that predicts disclosure of sexual desires. Specifically, it explores how individuals assess a potential disclosure based on the factors modeled in the DD-MM.

The following review of literature deepens the background of and reasoning for understanding the processes that this dissertation investigates. It begins with a summary of self-disclosure literature before focusing in on self-disclosure of sexual desires specifically and how it is connected to sexual communication more broadly. Then, stigma, as a general construct, and sexual stigma particularly are discussed, given their importance to concerns with communicating desires and the inclusion of stigma as a message factor in the DD-MM. The review ends with an overview and application of the DD-MM to the self-disclosure of sexual desires from which the project's research hypotheses and models are drawn.

Self-Disclosure

Researchers often view self-disclosure as a verbal message directed at another (e.g., Cozby, 1973; Culbert, 1970; Derlega et al., 1993; Goodstein & Reinecker, 1974). The messages can include personal states, dispositions, events in the past, and plans of the future (Derlega & Grzelak, 1979). In other conceptualizations, however, whenever information is shared about the

self, it is considered self-disclosure; thus, many verbal and nonverbal communicative acts could be deemed disclosive (Greene et al., 2006; Reiss, 1986; Rosenfeld & Civikly, 1976). From both of these standpoints, however, self-disclosure is seen as serving important personal and relational functions.

On the *personal* level, self-disclosure serves the function of individual expression of internal states, thoughts, or emotional experiences (Hastings, 2000) as well as self-clarification of beliefs, opinions, or attitudes, and self-validation of an individual's self-concept or identity (Derlega & Grzelak, 1979). Engaging in more self-disclosure has been linked with increased self-esteem, relational esteem, and responsiveness (Sprecher & Hendrick, 2004). On the *relational* level, self-disclosure has been tied to bond development (Hastings, 2000). Specifically, self-disclosure tends to bolster intimacy by allowing individuals to share information that helps another learn more about who they are and builds trust between relational partners (Derlega & Grzelak, 1979; Greene, 2009). Self-disclosing also plays an important role in relational maintenance (Rosenfeld & Kendrick, 1984) by increasing relationship quality (Sprecher & Hendrick, 2004), social liking (Collins & Miller, 1994; Vittengl & Holt, 2000), romantic attraction (Critelli & Dupre, 1978), and social support (Derlega et al., 1993). Disclosures of highly intimate information tend to be reciprocated (Derlega et al., 1993), and when such reciprocity occurs, it builds and strengthens relationships (Rosenfeld & Kendrick, 1984).

Disclosing certain information about the self can, however, be a vulnerable process (Petronio, 2002) and, as noted, has potential risks (Vogel & Wester, 2003). This is especially the case when the information being disclosed is more intimate and private (Farber & Hall, 2002). One primary risk has to do with internal consequences (Sheperis et al., 2017), such as

experiencing guilt, shame, anxiety, or fear (Derlega et al., 1993; Lewis, 1995) as the result of aspects of a discloser's identity being discovered (Sheperis et al., 2017) or evaluated negatively (Fisher & Choi, 2013) because of the disclosure. In addition, self-disclosure might pose external consequences that impact interpersonal relationships or an individual's standing in their larger social network (Greene et al., 2006).

Disclosing to a relational partner can threaten intimacy by causing a partner to reevaluate the relationship in light of another's disclosure (Derlega et al., 2008). The discloser could also lose agency if a disclosure recipient shared private information to a third-party (Catona et al., 2015; Venetis et al., 2012). Revealing private information about oneself to a broader social network could also result in losing social influence in their larger social network (Cheung et al., 2014). These potential risks can lead people to avoid disclosing information altogether (Vogel & Wester, 2003), although, as noted, nondisclosure itself can also have negative ramifications (Derlega et al., 1993). Both outcomes can occur for the disclosure of sexual desires.

Self-Disclosure of Sexual Desires

Self-disclosure of sexual desires is a type of sexual communication in which individuals discuss, for instance, their attitudes about sex or comment on others' sexual experiences (Byers & Demmons, 1999; Harris et al., 2014). Sexual communication is defined as the "verbal and nonverbal exchange of messages containing educational, episodic, and/ or relational content between intimate partners, parents and children, family members, peers, or co-workers" (Coffelt, 2020, p. 20). Relevant to the present study, it can also include telling a partner what satisfies the discloser sexually and revealing past sexual experiences (Byers & Demmons, 1999). Sexual communication, including self-disclosure of sexual desires, can involve communication prior to sex (i.e., flirting or sexual initiation; Hall, 2016), during sexual encounters (i.e., communication

about orgasm; Denes et al., 2020), and after sexual encounters (i.e., pillow talk; Denes, 2012). It can also involve communication about defining sexual relationships (e.g., as friends with benefits, a one night stand, exclusivity; Levine & Mongeau, 2011) or sexual history (Anderson et al., 2011).

In general, sexual communication across these specific topics has a range of positive outcomes. Higher levels of sexual communication are, for example, associated with greater sexual and relational benefits (Coffelt & Hess, 2014; Merwin et al., 2017; Rehman et al., 2011). Researchers have also reported a strong connection between more sexual communication and greater sexual satisfaction (i.e., “an affective response arising from one’s subjective evaluation of the positive and negative dimensions associated with one’s sexual relationships”; Byers et al., 1998, p. 258; see, also, Byers, 2011; Manning, 2021). Moreover, people’s satisfaction with their sexual communication (i.e., fulfillment with their communication about sexual behavior with their partner as well as their likelihood to communicate about sex; Wheelless et al., 1984) correlates positively with their sexual satisfaction (Cupach & Comstock, 1990; Mallory, 2022).

As one form of sexual communication, disclosure of sexual desires centers on five general topics: preferences, positive affect, sexual history, challenges, and negative affect (Coffelt & Hess, 2014). Of these, sexual preferences are discussed more frequently than the other four types (Coffelt & Hess, 2014). When discussing preferences, sexual partners are more likely to disclose their sexual likes than their dislikes (MacNeil & Byers, 2005). Moreover, these disclosures can occur through verbal or nonverbal means (Levin, 2006; Reiss, 1986). For example, a verbal disclosure might involve telling a partner, “I enjoy doing threesomes,” whereas an nonverbal disclosure about preferences could occur through showing a partner to use intense touch during sex acts.

In addition to disclosing sexual preferences, partners might also disclose their likes and dislikes through either positive or negative affect displays (Coffelt & Hess, 2014). Verbally, these types of disclosures might occur prior to sexual engagement, such as directly telling a partner, “I like trying new things with you,” or they might occur during sexual engagement, such as saying to a partner, “What you are doing turns me on.” Nonverbally, such disclosures might occur through short vocalizations (Levin, 2006), facial expressions, or body movements (Reiss, 1986) that signal positive affect as a response to a sexual behavior or act. Disclosing positive sexual affect messages, as well as disclosing sexual preferences, has been found to be correlated with relational satisfaction (Coffelt & Hess, 2014; Levin, 2006; Reiss, 1986), relational closeness (Coffelt & Hess, 2015), and orgasm (Denes et al., 2020), whereas sexual self-disclosures of negative affect messages are negatively correlated with relational satisfaction (Coffelt & Hess, 2014). Moreover, sexual partners can disclose about desires proactively to and reactively during sexual engagement, and doing so is likely relationally beneficial (Coffelt & Hess, 2014).

Stigma

Despite the beneficial findings in research on self-disclosure of sexual desires, some people avoid discussing sexual desires prior to engaging in sex. This can be due to fear of perceived identity or relationship threats (Anderson et al., 2011; Rehman et al., 2019). Such fears can be based in the stigma that might be associated with people’s attitudes, behaviors, and desires around sex. Goffman (1963) viewed stigma as a social judgment or preconceived perception of certain identities or behaviors. A subset of stigma broadly, sexual stigma is tied specifically to beliefs about sexual “deviancy,” a social construction that is learned during interaction with others. Sexual stigmatization occurs when there is a perceived norm violation and “stigmatizing responses” (Plummer, 1975) that results in people feeling ashamed and

labeling themselves as deviant. As such, Plummer (1975) asserted that meaning given to sexual behavior is not a “universal absolute, but ambiguous and problematic categories” (p. 31).

The risk of being stigmatized might deter individuals from engaging in self-disclosure of sexual desires. Specifically, anticipated stigma, or the intrapersonal process in which people expect others to judge and stereotype them negatively if the others learn about a stigmatized identity or behavior (Quinn & Chaudoir, 2009), can make individuals reluctant to disclose. For example, an interest in certain sexual acts, perceived as culturally taboo, might result in potential disclosers being fearful of being identified as sexually deviant (Plummer, 1975). This could explain why people often fail to disclose about sexual desires, even if there are benefits that disclosure might elicit (MacNeil & Byers, 2009).

For those with sexual desires that are recognized as particularly stigmatized (e.g., BDSM tendencies), disclosing desires is even more likely to result in anxiety based in fear for how potential partners or others might react (Bezreh et al., 2012; Cunningham et al., 2002). Research has found a basis for this fear, as such disclosures can lead to experiencing discrimination (Major & O’Brien, 2005) or humiliation (Brown, 2010). At the same time, however, *avoiding* the topic of sexual desires is associated with decreased sexual satisfaction (Theiss & Estlein, 2014) as well as a potential roadblock to formulating romantic connections (Theiss & Solomon, 2007). This finding is consistent with the claim that sexual communication avoidance overall can lead to negative outcomes, including poorer sexual health and lower well-being (Byers, 2011).

Message Forms: Directness and Channel

If people do decide to self-disclose sexual information, they can do so in direct or indirect ways (Harris et al., 2014; Theiss, 2011). Direct messages involve assertive and open communication, whereas indirect messages are more passive and closed (Theiss & Estlein,

2014). Harris and colleagues (2014) investigated message directness as participants strategized how to best communicate to a sexual partner that they wanted to engage in sexual activity.

Specifically, they found four types of sexual initiation strategies: creating a positive atmosphere, indirectly initiating a request, directly initiating a request, and perseverance. Of these, both initiating a request directly and perseverance involve explicit self-disclosure of a sexual desire. Such direct initiations involved attempting to initiate a sexual request by self-disclosing sexual preferences, such as “I would like to try a threesome, would you be interested?” (i.e., directly initiate a request) or “I would like a threesome, and if you wanted, you could choose the third person” (i.e., bargaining involved in the perseverance category). Indirect forms avoid disclosing sexual preferences directly and instead enact communication that, for instance, comments on others’ behavior, such as “I heard that Derrick and Sarah had a threesome, what do you think about that?” or physically incorporating an extradyadic individual while dancing with a primary sexual partner (i.e., indirectly initiating request).

Individuals might choose the form of their message based on perceived intimacy and/or certainty they have in their relationship (Knobloch & Carpenter-Theune, 2004). When relationships are less intimate and/or there is more relational uncertainty, for example, direct messages are more likely to impact the relationship negatively (Motley & Reeder, 1995). These negative outcomes include decreases in sexual satisfaction for both partners (Cupach & Comstock, 1990; MacNeil & Byers, 2005). Indirect forms, in such case, can be less face-threatening (Theiss & Estlein, 2014).

As noted, individuals can disclose through verbal and/or nonverbal channels (Greene, 2006). Both forms of messages can be direct or indirect. A direct nonverbal message might involve gesturing towards a part of the body or bringing in a sex toy into a sexual encounter,

whereas an indirect nonverbal message might be intensifying body movement or vocal sounds if a partner touches certain parts of the body. One reason why individuals might choose to enact nonverbal messages instead of verbal messages is due to the polysemous nature of nonverbal communication (Manusov, 2016; Manusov & Harvey, 2011). That is, nonverbal communication can be interpreted in more than one way within the same context by different people. As such, to minimize face-threat (Theiss & Estlein, 2014), a person might disclose nonverbally to potentially reject or contest the meaning behind their action if their partner does not react in the way the discloser had hoped or anticipated.

Given the sometimes complementary nature of nonverbal behaviors (Burgoon et al., 2022), verbal forms might also be accompanied by nonverbal behavior, such as gesturing towards a part of the body while verbally asking a partner to do a specific act. Deciding whether to disclose, and, if they do or plan to disclose, what form of message to use, is also guided by rules that are dependent on and embedded within the context of the relationship between the discloser and the listener (Chaikin & Derlega, 1974; Fisher, 1986) as well as larger social norms.

The Disclosure Decision-Making Model

Whether verbal or nonverbal, direct or indirect, the literature on self-disclosure of sexual desires emphasizes choice-making behind if and how people disclose their desires to another. To help delineate the cognitive processes that might be involved in self-disclosing about sexual desires, including the role of stigma and message directness and channel, this dissertation was guided by the disclosure decision-making model (DD-MM; Greene, 2009). According to the DD-MM, and clarifying the definition of self-disclosure at its base, self-disclosure is “an interaction between at least two individuals where one intends to deliberately divulge something personal to another” (Greene et al., 2006, p. 411). This definition presents disclosure as a

transaction, inclusive of both verbal and nonverbal communication, and perceives self-disclosure as a “social action that must be accomplished in interaction” (Greene, 2009, p. 246).

As noted, the DD-MM is based on theorizing about self-disclosure around health diagnoses (Choi et al., 2016; Pahwa et al., 2017; Venetis et al., 2015, 2018), with much of its application on disclosers’ decisions about non-visible health illnesses (Lee & Greene, 2023), including mental health (Venetis et al., 2018), concussions (Cranmer & LaBelle, 2018), and cancer (Dean & Rauscher, 2018). Specifically, in a study on trans* individuals’ experiences self-disclosing with medical practitioners, Friley and Venetis (2021) found that patients reported having to decide on whether their gender expression was salient to the medical interaction and, if so, whether their provider would perceive them as “trans enough” to qualify for transition-related care. Another study, examining married couples’ experiences with decision-making around disclosures to their extended social network about the couple’s struggle with infertility, found that the couples often chose to not disclose due to fear of the potential stigma attributed to either the mother or the father as unable to bear children (Steuber & Solomon, 2011).

An important feature of the DD-MM is its emphasis on self-disclosure as a process in which individuals have agency in deciding on the amount of information to share (Greene et al., 2006). When dealing with factors about which a decision-maker is uncertain, such as anticipated stigma, specific planning and communication forms are weighed and (potentially) enacted so as to minimize risk to the discloser and the relationship they have with their partner. According to the model, both whether people disclose, and the depth of the disclosure if they do choose to disclose, are reflective of their risk assessment processing. The DD-MM is intended to capture this dynamic process by looking at the factors that can influence the decision to disclose some pieces of information while concealing others, conceal all information, or choose not to disclose

at all (Greene et al., 2006). It also considers the motivation for why an individual might disclose (i.e., self-, other-, interpersonal-, and situational-environmental focus; Greene et al., 2006).

Whereas the DD-MM has yet to be applied to disclosure of sexual desires, each of the factors proposed by the models provides guidance for the decision-making process in which people might engage when assessing whether or not to disclose sexual desires to a partner. According to the DD-MM, an individual can exit the process and decide to choose nondisclosure based on each factor (Greene, 2009). Each of these factors is discussed next.

Factor One: Assessing the Information

The first factor of disclosure decision-making in the DD-MM is assessing the information in a would-be disclosure. Specifically, this appraisal process considers five components of information related to a disclosure: stigma, prognosis, symptoms, preparation, and relevance (Greene et al., 2012). Depending on their appraisal, an individual may decide if the rewards of disclosure outweigh the risks (Choi et al., 2016). Of these components, the one that is most applicable to self-disclosure of sexual desires is anticipated stigma (i.e., the perceived negative evaluation another will attach to the information).

An individual might begin their decision-making based on whether they anticipate stigma to be attached to what they would disclose and, particularly, if it might be a threat to the discloser. Across contexts, information-based motivations to disclose involve the desire to regulate information that is perceived by the individual as “high quality” (Afifi & Guerrero, 2000), which means that it is valued as more sensitive to the potential discloser. When potential disclosers’ desire to protect their private and public identities (their motivation to avoid experiencing vulnerability) is high, it can result in topic avoidance as a means of self-protection (Guerrero & Afifi, 1995). For example, people might perceive that certain sexual desires are too

sensitive to reveal because of others' discriminatory views on the content of the message (Major & O'Brien, 2005).

If the content of the message is assessed as risky, such as containing negatively-valenced information, then people will likely analyze the amount or type of risk associated with the disclosure (Fisher, 1986). Although previous research does not document how this might play out in self-disclosure of sexual desires, Afifi and Guerrero (1998) found that individuals are more likely to avoid disclosing dating or sexual experiences with opposite-gender friends because doing so creates threats to how they want those others to see them. Likewise, Golish and Caughlin (2002) found that sexual topics were the most avoided topics between children and their parents. Both studies allude to the importance of the content of the message and the risk to the discloser in determining whether to disclose about sex.

The DD-MM predicts that, the more likely the potential discloser is to perceive the potential disclosure to be stigmatized, the greater their likelihood for topic avoidance (Greene, 2009). Consistent with this, Venetis et al. (2015) found that cancer patients were less likely to disclose their diagnoses with romantic partners if they perceived that the stigma associated with the disclosure was too high. Although no research has looked directly at anticipated stigma around self-disclosure of sexual desires to relational partners, research has focused on self-disclosures of sexual information with medical professionals: Prior to disclosing, anticipated stigma has been found to hinder people from informing a medical professional about their sexual behavior, lowering the chance that patients can acquire assistance or treatment for STDs (Cunningham et al., 2002) and increasing the chance of untreated mental health (Wright, 2006) and feelings of shame (Pitagora, 2019).

Factor Two: Assessing the Receiver

The second factor of DD-MM is assessing the receiver. In this factor, the focus is on the anticipated reaction to the disclosure by the partner and perceived relational factors (Greene, 2009). Because much of what is communicated is listener-dependent (Derlega et al., 1993), as part of the decision-making process, individuals assess whether a partner is an “acceptable” person with whom to disclose. This judgment is based on how the disclosure thinks the other will react. For disclosures of sexual desires, it may also depend on judgments of how open a partner is to responding to the sexual needs of the potential discloser.

Anticipated Reaction

Individual expectations on partner reaction play a vital role in determining the likelihood of disclosure. Specifically, when a discloser perceives a recipient as being more likely to react positively to the disclosure, the individual is more likely to disclose to them (Laurenceau et al., 1998). The more a potential discloser can predict a partner’s reaction, and assume it will be favorable, the more likely the individual will choose to self-disclose (Greene, 2009). If a would-be discloser is not confident in how a recipient might react, or anticipates a negative reaction, they are likely to avoid disclosing (Harris et al. 2014; Wilson et al., 1998). This is known as anticipated reaction.

Anticipated reaction is made up of two dimensions within the DD-MM: *anticipated response* (i.e., emotional reactions, social support, and reciprocity) and *anticipated outcome* (i.e., potential relational consequences; Greene et al., 2012; Lee & Greene, 2023). The perceptions of anticipated response and outcome are both related to what information would be shared during a self-disclosure; however, the main difference between the two is that response is conceptualized as temporary, whereas outcome is conceptualized as final.

These two reactions can be related, however, in that a temporary response can result in the decision to enact a permanent relational change. For example, an individual may worry that disclosing a sexual desire might result in their sexual partner responding immediately with anger, which might then lead to a decision to break up with the self-discloser. In this instance, the temporary response led to a more permanent outcome. Both anticipated response and outcome predict greater confidence in disclosing (Greene et al., 2012) as well as greater perceived social support (Pahwa et al., 2017), such that a discloser is more confident that their disclosure will be reciprocated with affectionate, pro-social, tangible, or informational social support.

Sexual Communal Strength

Anticipated reaction is only one judgment that potential disclosers of sexual desires may consider when assessing the receiver. Another, more specific to this study and one that is newly applied to the DD-MM, is communal strength, or the desire an individual has to tend to the needs of their relational partner in order to maintain the welfare of both the partner and the relationship (Clark & Mills, 1979). One specific aspect of communal strength is *sexual communal strength* (SCS), which is the disposition to meet a partner's sexual desires and needs, often leading to more openness and higher willingness to communicate about sex (Muisse et al., 2012). If an assessment of a partner's SCS is higher, the potential discloser should feel more comfortable disclosing and believe that disclosing sexual desires would be more appropriate, both of which can contribute to the would-be discloser's decision-making.

These perceptions have a strong basis in research, as partners who are higher in SCS have been found to be more willing to engage in behavior that accommodates and satisfies the sexual needs of their partner. Specifically, individuals who are willing to meet their partners' needs are also more open-minded about their partners' desires and more willing to communicate their own

sexual preferences (Muise & Impett, 2015). When both partners both experience high SCS, the members report higher relational and sexual satisfaction (Muise & Impett, 2015).

Factor Three: Assessing Discloser Efficacy

The third factor of the DD-MM is discloser efficacy (Greene, 2009). This construct involves the potential discloser's judgment of their own communication ability. More specifically, disclosure efficacy involves the "perceptions of one's ability to share specific information with specific others for desired outcomes" (Greene, 2009, p. 242). This assessment can be thought of as individuals' confidence and belief in their skills to disclose successfully (Greene et al., 2012). Skill in disclosing involves practice and preparation, such as choosing a time, the wording of the disclosure, and the location for disclosing (Greene, 2009). Importantly, people with higher confidence in their ability to disclose tend to do so more often (Afifi & Steuber, 2009).

In general, communicating about sexual topics can be a challenging and face-threatening endeavor for partners (Cupach & Metts, 1991; Noland, 2010). A specific form of efficacy, sexual communication comfort, is an individual's level of ease communicating about sexual topics, and it has been found to impact openness to self-disclosing more broadly (Sneed, 2008). If individuals feel comfortable engaging in conversations on sexual topics with their relational partner, they are more inclined to also self-disclose sexual information; they also report both higher relational and sexual satisfaction after their decision to do so (Rubinsky & Hosek, 2020).

Factor Four: Preparing for the Disclosure

Greene's (2009) initial DD-MM included only the three factors just described. Choi and colleagues (2016) extended the model by introducing a fourth factor that centers on what people might do prior to enacting the disclosure. For Choi et al, preparing for enactment involves both

planning (i.e., mental preparation for) and scheduling (i.e., selecting a time for) the disclosure. In their extension, the researchers found that discloser efficacy was negatively correlated with planning of self-disclosure. That is, the less confident individuals are in their ability to enact a disclosure, the more likely they are to prepare ahead.

This sort of mental rehearsal aids in deciding the directness of messages when disclosing (Afifi & Steuber, 2009) as well as deciding on which channel to use when disclosing, such as face-to-face, through a third-party, or via computer-mediated communication (Venetis et al., 2018). Planning can also involve choosing the quantity of information to share, such as only disclosing incremental pieces of information to test out recipients' reactions to the information (Catona et al., 2015). If a person *did* decide to plan their disclosure, and they spent more time mentally planning and rehearsing the disclosure, the more likely they were to schedule a specific time to disclose (Choi et al., 2016).

Hypothesized Models

The original purpose of the DD-MM was to predict the likelihood that an individual (who had not yet done so) would self-disclose to another (Greene, 2009). Later, Greene and colleagues (2012) tested two versions of the DD-MM: one for those who reported having not self-disclosed and one model for those who reported having disclosed. In an extension of initial applications of the model, their “undisclosed” model predicted likelihood to disclose in the future, and their “disclosed” model predicted depth of the disclosure. Each of these models also looked for significant pathways between the DD-MM factors. All the DD-MM factors explained variance in and predicted the outcome in both models, though there was some variation in how they did so (Greene et al., 2012).

This dissertation followed and extended Greene and colleagues' lead by testing three sets of models: two for those who have not disclosed ("the undisclosed") and one for those who have ("the disclosed"). Consistent with Greene et al., the first set of models tests the DD-MM factors on the likelihood to disclose to a current partner in the future for those who have not disclosed prior; the second set of models tests the factors with the likelihood to use specific message forms (direct/indirect and verbal/nonverbal) in the future for those who have not disclosed prior, an expansion of the DD-MM. Also building from the DD-MM, the third set of models tests the factors with the specific message form used by those who had already disclosed their sexual desires to their partners. These models add to the previous body of work using the DD-MM, not only by applying it to sexual self-disclosures, but also by including message form as the outcome variable.

Models One and Two: Likelihood to Disclose and Message Forms by Those Who Have Not Disclosed

To best test and extend the DD-MM for the undisclosed, two models assessed the decision-making of people who have not disclosed their sexual desire to a partner. The first predicts the likelihood of disclosing (Figure 1), and the second predicts people's likelihood to utilize specific message forms if they choose to disclose in the future (Figure 2). Based on Greene et al. (2012), and research on sexual disclosures (e.g., Coffelt & Hess, 2014; Cunningham et al., 2002), the following set of hypotheses are proposed as part of the two model sets. Those with the subscript a are for model 1 (likelihood of disclosing), and those with subscript b are for model 2 (likelihood of using certain message forms).

When individuals perceive higher anticipated stigma during the information assessment stage, they will anticipate less certainty in how their partner will respond (H_{1a} and H_{1b}) and the

outcome of their disclosure (H_{2a} and H_{2b}), as well as feel less confident in their ability to enact the disclosure (i.e., efficacy) (H_{3a} and H_{3b}). Degree of certainty in a receiver's positive and supportive response should result in more certainty in positive relational outcomes (H_{4a} and H_{4b}), where both anticipated response (H_{5a} and H_{5b}) and anticipated outcome (H_{6a} and H_{6b}) should increase the likelihood to disclose and use direct-verbal and direct-nonverbal messages. If the relational outcomes are more certain, then so should belief in one's own ability to disclose (H_{7a} and H_{7b}).

Additionally, people with stronger perceptions of closeness to their partner (assessed in the present study as relational quality) and sexual communal strength will also have more certainty in receiver response (H_{8a}, H_{8b}, H_{9a}, and H_{9b}) and self-efficacy in disclosing sexual desires (H_{10a}, H_{10b}, H_{11a}, and H_{11b}). Perceptions of closeness will also have a direct relationship with the future likelihood to disclose a sexual desire (H_{12a} and H_{12b}). Both higher perceptions of relational quality and partner sexual communal strength will predict more comfort with sexual communication (H_{13a}, H_{13b}, H_{14a}, and H_{14b}). Moreover, comfort with sexual communication will predict both the likelihood to disclose (H_{15a}) and the use of direct-verbal and direct-nonverbal message forms (H_{15b}). Finally, increased belief in one's own efficacy should predict a higher likelihood to disclose in the future (H_{16a}) and to use more direct-verbal and direct-nonverbal forms (H_{16b}). Efficacy should also predict message preparation (H_{17a} and H_{17b}). Message preparation is hypothesized to predict the likelihood to disclose in the future (H_{18a}) and use direct-verbal and direct-nonverbal forms (H_{18b}).

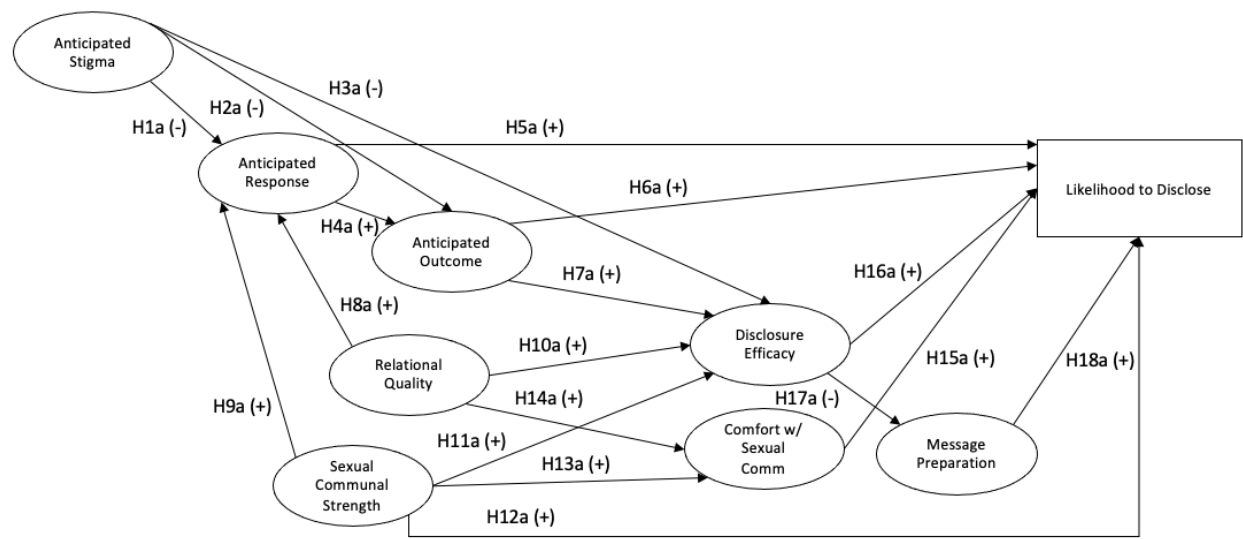


Figure 1. Predicted Path Model for Likelihood to Disclose for the Undisclosed

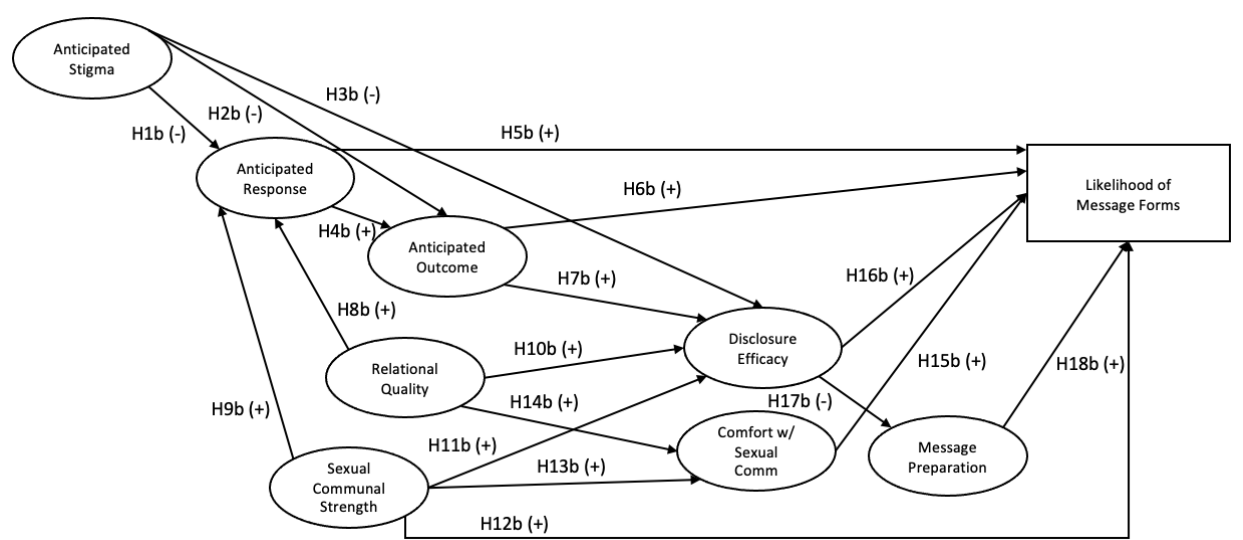


Figure 2. Predicted Path Model for Likelihood for Message Forms for the Undisclosed

Model Three: Use of Message Forms for Those Who Have Disclosed

After people have assessed the information, receiver, efficacy, and planning related to their decision about whether or not to disclose, and if they have decided to do so, they must then enact the message through disclosure forms. Such communication might involve which channel to use (e.g., verbal and/or nonverbal) and how direct their message should be (Catona et al.,

2015; Venetis et al., 2018). To best test and extend the DD-MM for the disclosed, then, a third model assesses the decision-making of people who have disclosed their sexual desire to a partner. The model predicts the use of reported message forms when disclosing sexual desires (Figure 3).

As noted, in Greene et al. (2012) the model for those who have disclosed was used to predict the depth of the disclosure rather than likelihood to disclose. For this dissertation, the outcome variable is message form. Consistent with Harris et al. (2014) and Theiss (2011), message directness involves how open and honest an individual chooses to be when disclosing information (Theiss & Estlein, 2014). Directness will be examined through both the channels of verbal and nonverbal communication, leading to four categories of messages: direct-verbal, indirect-verbal, direct-nonverbal, and indirect-nonverbal. Guided by the hypothesized relationships and findings in Greene et al (2012), the following hypotheses are proposed.

Higher anticipated stigma associated with their sexual desire information will predict having had less certainty for how the receiver would respond (H₁₉) and for the relational outcome of their disclosure (H₂₀). In addition, greater anticipated stigma will predict disclosers having had lower levels of efficacy (H₂₁). More certainty in their partners' anticipated response will predict having more certainty in anticipated outcome (H₂₂), which in turn should positively predict disclosers' belief in their ability to have disclosed to their partner (H₂₃). Both anticipated response and anticipated outcome should predict more direct-verbal and direct-nonverbal message forms (H₂₄ and H₂₅).

Perceptions of both relational quality and sexual communal strength will positively predict their level of certainty in anticipated positive responses disclosers perceived prior to disclosing (H₂₆ and H₂₇). Both greater relational closeness and partner sexual communal strength

will predict a stronger belief in ability to disclose (H₂₈ and H₂₉) and greater comfort discussing sexual communication (H₃₀ and H₃₁), and comfort with sexual communication will predict the likelihood of having used direct-verbal and direct-nonverbal message forms (H₃₃). As well, sexual communal strength will directly predict the use of direct message forms (H₃₂).

Finally, more favorable views of their own disclosure efficacy will predict disclosers having used more direct-verbal and direct-nonverbal message forms (H₃₅) and how much they prepared prior to disclosing (H₃₄). The more time spent preparing their message will predict a greater likelihood to have used more direct-verbal and direct-nonverbal message forms (H₃₆).

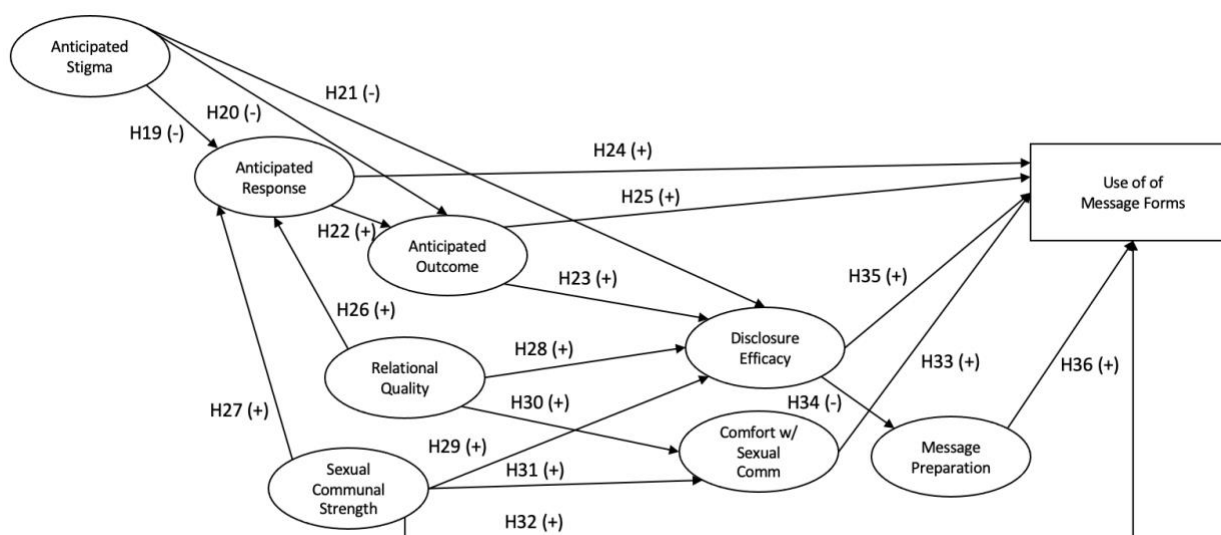


Figure 3. *Predicted Path Model for Use of Message Forms for the Disclosed*

Summary

The factors of the DD-MM (Greene, 2009) are used in this study to predict the likelihood for individuals to disclose in the future if they have not previously done so, the likelihood to use both direct-verbal and direct-nonverbal message forms in the future, and reported verbal and nonverbal message directness used by those who have disclosed previously. As proposed, and in line with the original model (Greene, 2009) and applications and extensions of it (Choi et al., 2016; Cranmer & LaBelle, 2018; Venetis et al., 2017), it was expected that components of the

first factor of information assessment (i.e., anticipated stigma) should predict components of the second factor of receiver assessment (i.e., anticipated response, anticipated outcome, relational quality, sexual communal strength), which in turn predict the components of the third factor of discloser efficacy (i.e., disclosure efficacy and comfort with sexual communication). This, ultimately, predicts the components of the fourth factor of message preparation (i.e., planning and scheduling). Discloser efficacy should predict both the level of message preparation and on the likelihood of disclosure, the use of both direct-verbal and direct-nonverbal forms, and, for those who disclosed, the use of direct-verbal and direct-nonverbal forms. The next chapter overviews the methods used to gather data to test these models.

Chapter Two: Methods

This dissertation used a cross-sectional survey research design (Cohen, 2008; McClendon, 1994) to test the models for those who did not yet disclose their sexual desires to a current partner and for those who had. There were eight predictor variables, based in and extending the DD-MM: anticipated stigma, anticipated response, anticipated outcome, relational quality, perception of partner's sexual communication strength, discloser efficacy, comfort with self-disclosure of sexual desires, and message preparation. There were three outcome variables, depending on the models: likelihood to self-disclose sexual desires and likelihood of message directness for the undisclosed and message directness for the disclosed. Procedures were IRB approved before data collection commenced.

Participants

Inclusion criteria for participants were that they (a) were over the age of 18, (b) identified as currently being in an ongoing romantic or sexual relationship, and (c) had specific sexual desires. The recruitment scripts are in Appendix A. Recruitment was conducted through two routes, for a total of three data collection periods. The first and second data collection periods used Amazon Mechanical Turk (MTurk), a crowdsourcing marketplace that offers a diverse sample. In their meta-analysis of MTurk samples compared to non-MTurk samples, Keith and colleagues (2022) found no significant scale mean or variance differences. In addition, Hunt and Scheetz (2019) found that the higher number of screens (i.e., qualification requirements) was negatively correlated with manipulation check failures for paid participants.

For the first data collection period, two qualification requirements were used for survey distribution: (1) participants had to have a Human Intelligence Task (i.e., HIT) approval rate greater than 95%, (2) they had to have had at least 500 approved HITs, and (3) had to currently

live in the U.S. A HIT is a self-contained virtual task that workers submit and then collect a reward for completing. Their approval rate is a representation of how many tasks they were approved for completing that resulted in receiving their award. The purpose of this set of qualifications was to increase the reliability of the participants. These participants received \$4.00 compensation through MTurk upon completion of the survey, with 152 participants recruited through this means.

After three days with the survey posted, no new participants were signing up to take the survey, so the qualification requirements were slightly lowered and a second call-for-participation was sent out. For this data collection period, qualification requirements were that participants had to (1) have a HIT approval rate greater than 90%, (2) have at least 100 approved HITs, and (3) currently live in the United States of America. The purpose of lowering this set of qualifications was to increase the number of participants while also maintaining the testing reliability and quality of participants. These participants received \$4.00 compensation through MTurk upon completion of the survey, with 126 participants recruited through this means. Across the two MTurk data collection periods, 278 participants were recruited.

For the third data collection period, a second avenue of recruitment was through introductory communication courses at the University of Washington. Participants in this group were able to opt-in to win one of two \$50 Visa gift cards, and 58 participants were recruited through this means. The purpose of using this participant pool was to avoid lowering the MTurk qualifications even further, resulting in the potential for less reliable participants. Given the average age of the MTurk participants were 42.34 ($SD = 12.10$), the researcher believed using a second pool of potential participants would increase the generalizability of the findings by including younger participants.

In total, 336 participants were recruited for this study. Using G*Power 3.1 software, for a χ^2 goodness-of-fit test with an effect size of .5 and 51 degrees of freedom, 174 participants were needed to reach an effect size of .5. It was expected that some participants might fail attention check items or appear to have not taken the measures seriously resulting in the data set having portions of missing data. Collecting a larger sample was a safeguard against losing power.

The mean age of the participants was 36.72 ($SD = 13.44$). Demographically, 51.8% identified as women/Trans* women, 46.0% identified as men/Trans* men, and 1.8% as non-binary or queer. Approximately 70.2% of the participants identified as Caucasian/White, 12.0% Asian or Asian American, 5.2% Black or African American, 3.4% Latino/Latina/Hispanic, 7.4% as multi-racial, and 1.6% as other/not listed. In the sample, 92.9% reported not having a disability, 2.1% indicated having ambulatory difficulty, 1.8% having cognitive difficulty, 1.2% listing multiple difficulties, and one participant each reporting a self-care difficulty and vision difficulty.

For their current relationship status, participants (38.4%) reported that were dating, married (35.4%), living together but not married (12.9%), in a causal relationship (6.1%), were friends with benefits (2.7%), with 1.4% reporting as other (e.g., widowed, long distance) and 3.1% reporting “it’s complicated.” For the length of their current relationships, 12.0% had been together for 0-6 months, 12.0% for 7-12 months, 8.6% for 1-2 years, 4.9% for 2-3 years, 1.8% for 3-4 years, 38.3% for 4-5 years, and 9.5% for 5 or more years. In relation to their reports of their sexuality and sexual history, 84.4% were heterosexual, 2.8% were homosexual, 10.4% were bisexual, 1.2% as pansexual, and one participant self-identified as queer. The mean number of reported sexual partners over their life was 9.62 ($SD = 15.01$), and 87.7% of participants indicated being currently sexually active at the time of taking the study.

Procedure

Participants who qualified for the study received an email either through the MTurk program or via UW Canvas announcements that provided more information about the nature of the study. This information included a consent form that provided potential participants with sufficient information to consent to participate in the study. The consent form is in Appendix B. In addition, participants read a statement on risks and privacy, given the inherent intimacy of the topic of the study. This statement can be found in Appendix C. If they consented, they were then asked questions assessing their experience with disclosing one or more sexual desires to their current partner. These items were structured in four blocks. The blocks were organized based on each factor of the DD-MM in the order presented in the model, with the questions worded differently, when relevant, for those who have those who have not disclosed about the sexual desires with their current partner and for those who had disclosed. This follows the procedure used by Greene and colleagues (2012) that includes “undisclosed” and “disclosed” models.

Block one included a measure of anticipated stigma. Block two included assessments of anticipated response, anticipated outcome, relational quality, and perception of partner sexual communal strength. Block three included scales for discloser efficacy and comfort with sexual communication items. Block four, for those who had not disclosed received items that measured planning, scheduling, and the likelihood of message directness; those who had disclosed received items that measured planning, scheduling, and message directness via verbal and nonverbal means.

At the end of the survey, participants answered demographic items and items about their sexual history to be used as descriptive data. Attention check items were included in two of the four blocks, given the number of items in some blocks exceed 15 items (13 and 26), for a total of

three attention check items for each participant. Participants who did not answer at least two of the attention check items correctly were removed from the dataset prior to analysis, which resulted in six participants being removed, for a final sample size of 326. The survey was completed in an average of 12.47 minutes ($SD = 7.47$).

Measures

Variables measured for both groups (undisclosed and disclosed) included relational quality, sexual communal strength, and comfort with sexual communication. Variables measured for the two undisclosed models included anticipated stigma, anticipated response, anticipated outcome, efficacy, planning, scheduling, likelihood to disclose in the future, and the likelihood of using particular message forms if they chose to disclose in the future. Variables measured for the disclosed model included retrospective reports of anticipated stigma, anticipated response, anticipated outcome, efficacy, planning, scheduling, and the message forms they used when they disclosed.

Self-Disclosures of Sexual Desire

Participants were directed to do the following: *“Think of a behavior or thing that you wanted to try sexually that you revealed or did not reveal to your current partner. Throughout the survey, this behavior or thing will be referred to as “sexual desire.” Keep this person and situation in mind as you answer the questions throughout this survey. Please answer the following questions.”* They were then asked these questions: “What is/was the desire?” (open response); “How important would you rate the sexual desire to you?” (on a Likert-type scale from 1 [very unimportant] to 7 [very important]); and “Did you disclose this desire to your current partner?” (Yes/No).

Participants who responded “No” on this third item were asked two additional questions assessing likelihood of disclosure. Mirroring Greene et al. (2012), an assessment of the likelihood that participants will disclose their sexual desires to a current partner was adapted from a two-item scale by Vangelisti et al. (2001) focused on family secrets (reported $\alpha = .94$). The participants were prompted as follows: “*Thinking of your current partner, please respond to the following statements on a scale from 1 (strongly disagree) to 7 (strongly agree).*” The two items were “I am likely to reveal my sexual desires to my partner in the near future” and “I doubt that I will share this information with my partner in the near future.” The second question was reverse-coded. The measure was reliable ($\alpha = .87$). Scores were composited to form one likelihood to disclose score ($M = 3.71, SD = 1.75$). Higher scores indicate greater likelihood to disclose their sexual desire for those who have not yet done so.

Block One: Information Assessment

Anticipated Stigma. Adapted from Quinn and Chaudoir (2009), the Anticipated Stigma 15-item scale (reported $\alpha = .95$) is comprised of 13 items that measure participants’ expectation that they would be stigmatized if they were to self-disclose their sexual desire to a partner. Quinn and Chaudoir originally adapted a nine-item “day-to-day” discrimination scale from Kessler et al. (1999; reported $\alpha = .87$) and then added five items that focused specifically on college students, their target population. Quinn and Chaudoir’s (2009) scale focused on living with mental health, and so it was modified for this study to apply to the stigma that might be associated with sexual desires. Two items were removed, as they were not relevant to the current investigation: “getting poorer service than others are a restaurant” and “getting poorer service than others at stores.”

Depending on whether or not participants reported having self-disclosed a sexual desire to their partner, participants received one of two versions of these items that were worded specifically to assess their experience. Participants who reported that they have not self-disclosed their sexual desire to their current partner were prompted as follows: *“Please read the following statements and indicate on a scale from 1 (strongly disagree) to 7 (strongly agree) what you think would happen if you disclosed to your current partner about your sexual desire.”* The 13 modified items were “My partner would act as if I was inferior”; “My partner would act as if I was not smart”; “My partner would act as if they are afraid of me”; “I would be treated with less courtesy by my partner”; “I would be treated with less respect by my partner”; “My partner would act as if I am dishonest”; “I would be called names or insulted by my partner”; and “I would be threatened or harassed by my partner”; “My partner would not want to date me”; “My partner would stop hanging out with me”; “My partner would avoid me”; “My partner would not want to get to know me better”; and “My partner would not want to get involved in an intimate relationship with you.” The measure was reliable ($\alpha = .96$). The 13 items were then made into a composite score indicating anticipated stigma ($M = 2.31, SD = 1.38$). Higher scores indicated greater anticipated stigma towards their sexual desire if they were to disclose in the future.

Participants who reported that they had disclosed their sexual desire to their current partner were prompted with this statement: *“Thinking back to disclosing your sexual desire to your current partner, indicate on a scale from 1 (strongly disagree) to 7 (strongly agree) for each of the following statements how much you thought about the following before you told your partner your sexual desire.”* The 13 modified items were “I thought my partner would act as if I was inferior”; “I thought my partner would act as if I was not smart”; “I thought my partner would act as if they are afraid of me”; “I thought I would be treated with less courtesy by my

partner”; “I thought I would be treated with less respect by my partner”; “I thought my partner would act as if I am dishonest”; “I thought I would be called names or insulted by my partner”; “I thought I would be threatened or harassed by my partner”; “I thought my partner would not want to date me”; “I thought my partner would stop hanging out with me”; “I thought my partner would avoid me”; “I thought my partner would not want to get to know me better”; and “I thought my partner would not want to get involved in an intimate relationship with you.” The measure was reliable ($\alpha = .96$).

Block Two: Receiver Assessment

Anticipated Response. To measure participants’ anticipated response by their current partner to a disclosure of their sexual desire, 12 items were adapted from the 15-item Greene et al. (2012) Anticipated Response Scale (reported $\alpha = .80$). The original scale was worded for disclosing health information but was modified for this study to focus on self-disclosure of sexual desires. Three items were not adapted from the original scale due to their specific relevance to health information. Depending on whether participants reported having disclosed a sexual desire to partner, participants received one of two version of these items that were worded specifically to assess their experience. Items 2, 4, 5, 6, 8, and 9 were reverse coded. Higher scores indicated greater perceived certainty around how supportive a partner would respond.

Participants who reported that they had not disclosed their sexual desire were prompted as follows: “*Imagine telling your sexual desire to your current partner, then answer the following questions from 1 (strongly disagree) to 7 (strongly agree) about how your partner would react.*” The modified 12 items were “I am confident that I know how my partner would respond”; “I don’t know what kind of response I would get from my partner”; “My partner’s response will be similar to their previous responses”; “My partner would have a negative

emotional reaction”; “My partner would treat me differently”; “I am not sure how my partner would respond”; “My partner would be understanding”; “My partner would tell other people my sexual desires against my wishes”; “My partner wouldn’t be able to handle the sexual desire information”; “My partner would listen sympathetically”; “My partner would treat me no differently”; and “My partner would also disclose a sexual desire if I told them my sexual desire.” The measure was reliable ($\alpha = .87$).

Participants who reported that they had disclosed their sexual desire were prompted as follows: “*Think back to before you disclosed your sexual desire to your current partner. Please read the following statements and indicate on a scale from 1 (strongly disagree) to 7 (strongly agree) on your beliefs for how your partner would react after telling them your sexual desire.*” The 12 items were “I was confident that I knew how my partner would respond”; “I didn’t know what kind of response I would get from my partner”; “I thought my partner’s response would be similar to their previous responses”; “I thought my partner would have a negative emotional reaction”; “I thought my partner would treat me differently”; “I wasn’t sure how my partner would respond”; “I thought my partner would be understanding”; “I worried my partner would tell other people my sexual desires against my wishes”; “I thought my partner wouldn’t be able to handle the sexual desire information”; “I thought my partner would listen sympathetically”; “I thought my partner would treat me no differently”; and “I thought my partner would also disclose a sexual desire if I told them my sexual desire.”

Anticipated Outcome. To measure participants’ perceptions of anticipated outcomes for participants who reported not having self-disclosed sexual desires to their current partner, referred to also as *relational* outcomes, five items were modified from Magsamen-Conrad’s (2012) Anticipated Relationship-Oriented Outcomes scale (reported $\alpha = .94$). The original scale

was about disclosing health information but was modified to focus on self-disclosure of sexual desires for this dissertation. Depending on whether participants reported having disclosed a sexual desire to partner, they received a version of these items that were worded specifically to assess their experience. In both versions, the first, third, and fourth items were reverse-coded.

Participants who reported having not disclosed their sexual desire were prompted with the following: *“Answer the following questions from 1 (strongly disagree) to 7 (strongly agree) about the potential outcome if you told your partner your sexual desire.”* The five items were as follows: “I think sharing this information would change our relationship”; “I think our relationship would improve after I shared this information”; “I think our relationship would worsen after I shared this information”; “I think I would regret telling my partner this information”; and “I think I would be glad I shared this information with this person.” The measure was reliable ($\alpha = .89$).

Participants who reported having disclosed their sexual desire to their partner were prompted with the following: *“Remembering back to before you told your partner about your sexual desire, please read the following statements and indicate on a scale from 1 (strongly disagree) to 7 (strongly agree) what you thought would occur.”* The five items were as follows: “I thought sharing this information would change our relationship”; “I thought our relationship would improve after I shared this information”; “I thought our relationship would worsen after I shared this information”; “I thought I would regret telling my partner this information”; and “I thought I would be glad I shared this information with this person.” A correlation matrix revealed that one item should be removed (i.e., item two). Two reliability tests were then performed with ($\alpha = .69$) and without ($\alpha = .78$) the item. Given its increased reliability without the item, it was removed.

Relational Quality. Perceptions of relational quality with their current partner were measured with eight items from Checton and Greene's (2012) Relational Quality Scale (reported $\alpha = .82$). All participants were prompted with the following: "*Thinking of your current partner, please read the following statements and indicate how much you agree with each statement on a scale from 1 (strongly disagree) to 7 (strongly agree).*" The eight items were "I enjoy spending time with my partner"; "My relationship with my partner is important to me"; "I am not close to my partner"; "My partner's opinion is important to me"; "This relationship is satisfying"; "I get everything that I need out of this relationship"; "My partner does not understand my wants and needs"; and "I couldn't ask for more from my partner." The third and seventh question were reverse coded. The measure was reliable ($\alpha = .89$).

Sexual Communal Strength. This study used an adapted version of the six-item Sexual Communal Strength scale by Muise et al. (2012) (reported $\alpha = .77$), which measured participants' perceptions of their partners' sexual communal strength (SCS). For this study, the scale was reworded to measure participants' perceptions of their partner's SCS. Participants were first prompted with these directions: "*Thinking of your current partner, please answer the following statements on a scale from 1 (strongly disagree) to 7 (strongly agree).*" The six items were "My partner is willing to go far to meet my sexual needs"; "My partner readily puts my sexual needs out of their thoughts"; "My partner places meeting my sexual needs as a high priority"; "My partner easily accepts not meeting my sexual needs"; "My partner would sacrifice their own needs to meet my sexual needs"; "My partner would feel happy if/when satisfying my sexual needs." The second and fourth questions were reverse-coded. The measure was reliable ($\alpha = .87$).

Block Three: Discloser Efficacy

Efficacy. Participants' perception of their ability to disclose their sexual desires to a current partner was measured using four items from Checton and Greene's (2012) Discloser Efficacy to Partner scale (reported $\alpha = .84$). The scale was adjusted from a focus on disclosing health information to disclosing sexual desires. Depending on whether or not participants reported having self-disclosed a sexual desire to partner, they received a version of these items worded specifically to assess their experience. The second and fourth items were reverse-coded. Scores within each set were averaged to form participants' disclosure efficacy score. Higher scores indicated a stronger belief in their ability to self-disclose sexual desires.

Participants who reported that had not self-disclosed their sexual desire to their current partner were prompted as follows: "*Thinking of your current partner, please respond to the following statements from 1 (strongly disagree) to 7 (strongly agree).*" The four items were "I am confident that I can share my sexual desires with my partner when I want to"; "I have difficulty sharing my sexual desires with my partner"; "If I want to, I can talk to my partner about my sexual desires"; and "I do not know what to say when I try to share my sexual desires with my partner." The measure was reliable ($\alpha = .89$).

Participants who reported having disclosed their sexual desire to their current partner were prompted with this statement: "*Please think back prior to disclosing your sexual desire to your current partner, then respond to the following statements on a scale from 1 (strongly disagree) to 7 (strongly agree).*" The four items were "I was confident that I could share my sexual desires with my partner when I want to"; "I had difficulty sharing my sexual desires with my partner"; "If I wanted to, I could talk to my partner about my sexual desires"; and "I did not

know what to say when I tried to share my sexual desires with my partner.” The measure was reliable ($\alpha = .82$).

Comfort with Sexual Communication. To assess participants’ comfort with sexual communication, seven items were taken from Harris and colleagues’ (2014) Sexual Communication Scale (reported $\alpha = .91$). Participants were prompted with the following: *“Please respond to the following statements on a scale from 1 (strongly disagree) to 7 (strongly agree).”* The seven items were “My partner and I share sexual information with each other”; “My partner and I talk to each other about a variety of sexual topics”; “There is nothing about our sex life I could not tell my partner”; “My partner and I self-disclose our private thoughts and information about sex”; “My partner and I have difficult discussing most sexual topics”; “I can talk to my partner about anything sexual”; and “My partner and I are open about sexual communication.” The measure was reliable ($\alpha = .95$).

Block Four: Message Preparation

Planning and Scheduling. To assess participants’ planning of a self-disclosure (either retrospective, if they have disclosed, or about the future if they have not), two items were used from Choi et al.’s (2016) Self-Disclosure Planning Scale. To assess participants’ scheduling of self-disclosure, Choi et al.’s one-item Self-Disclosure Scheduling scale was used. All items were modified to fit the focus of the present study.

Participants who had not disclosed were prompted as follows: *“Please respond to the following statements on a scale from 1 (strongly disagree) to 7 (strongly agree).”* Participants first responded to the two items assessing planning, which were “I will spend a lot of time planning to tell my current partner my sexual desire before doing so” and “I will think a lot about telling my current partner my sexual desire before doing so.” It was reliable ($\alpha = .94$). These two

items were averaged to create a composite score for planning ($M = 4.99$, $SD = 1.75$). Higher scores indicated more expected time planning the self-disclosure. Participants then responded to one item assessing scheduling, which was “I would schedule a specific time to share the information of my sexual desire with my current partner” ($M = 3.68$, $SD = 1.85$). A higher score indicated a greater likelihood to schedule a time to self-disclose if they were to disclose in the future.

Participants who had disclosed were prompted with the following: “*Please respond to the following statements on a scale from 1 (strongly disagree) to 7 (strongly agree).*” They first responded to the two items assessing planning, which were “I spent a lot of time planning to tell my current partner my sexual desire” and “I thought a lot about telling my current partner my sexual desire.” The measure was reliable ($\alpha = .81$). Participants then responded to one item assessing scheduling, which was “I scheduled a specific time to share the information of my sexual desire with my current partner” ($M = 2.35$, $SD = 1.67$). A higher score indicated greater agreement with having scheduled their self-disclosure.

Message Form. To assess whether participants would be more likely to use direct or indirect forms for disclosing of sexual desires if they have not done so, and to discern whether those messages were (or would be) sent using verbal or nonverbal communication, 23 items were created for this study. Those items were based on Gossman et al. (2002) and Harris et al. (2014), who both reported categories of sexual initiation through direct and indirect forms. The items were designed to account for verbal and nonverbal self-disclosure message forms: (1) direct-verbal self-disclosure, (2) indirect-verbal self-disclosure, (3) direct-nonverbal self-disclosure, and (4) indirect-nonverbal self-disclosure. There was also a place to choose “other” for participants whose experiences or predictions of likelihood were not represented by the provided

options, and participants were given an option to write-in a qualitative response. Depending on whether participants reported having self-disclosed a sexual desire to partner, they received one of two versions of these items worded specifically to assess their experience.

Participants who reported they have not disclosed their sexual desire were prompted as follows: *“Thinking of your partner, please indicate how likely you would be to enact the following behaviors from a scale from 1 (highly unlikely) to 7 (highly likely).”* Participants were given eight sets of items based on message directness and channel. For verbal-direct disclosures, the three items were as follows: “I would verbally tell my partner my sexual desire directly, such as ‘I am interested in this’”; “I would verbally tell my partner my sexual desire directly, such as ‘I want to try this’”; and “I would verbally ask my partner about my sexual desire directly, such as ‘Would you want to try this?’” The measure was reliable ($\alpha = .87$). Scores from the three questions were computed into a composite score representing likelihood to engage in direct-verbal message forms ($M = 4.83$, $SD = 1.51$). Higher scores indicated greater likelihood to engage in direct-verbal message forms if they were to disclose in the future.

For verbal-indirect disclosures, the four items were “I would verbally comment about the sexual desire to my partner but would not say that I personally was interested, such as ‘Have you heard about this sexual desire?’”; “I would verbally comment about the sexual desire to my partner but would not say that I personally was interested, such as ‘What do you think of this sexual desire?’”; “I would talk about the sexual desire in general, such as, ‘The characters in the movie did this’”; and “I would make a joke about the sexual desire, such as, ‘Wouldn’t it be funny if we tried that?’” The measure was reliable ($\alpha = .84$). Scores from the four questions were computed into a composite score representing likelihood to engage in indirect-verbal

message forms ($M = 3.86$, $SD = 1.56$). Higher scores indicated greater likelihood to engage in indirect-verbal message forms if they were to disclose in the future.

For nonverbal-direct disclosures, the three items were as follows: “I would indicate my sexual desire through nonverbal behavior by showing my partner an object that I would want to use during sex”; “I would indicate my sexual desire through nonverbal behavior, such as using my hands to gesture to do something”; and “I would indicate my sexual desire through nonverbal behavior, such as guiding my partner to a specific behavior.” The measure was reliable ($\alpha = .87$). Scores from the three questions were computed into a composite score representing likelihood to engage in direct-nonverbal message forms ($M = 3.38$, $SD = 1.70$). Higher scores indicated greater likelihood to engage in direct-nonverbal message forms if they were to disclose in the future.

For nonverbal-indirect disclosures, the three items were “I would indicate my sexual desire by doing something that involved my sexual interest but not did use verbal communication, such as leaving up a video on a computer that involved the behavior”; “I would indicate my sexual desire by doing something that involved my sexual interest but not did use verbal communication, such as wearing (or not wearing) certain articles of clothing”; and “I would indicate my sexual desire by doing something that involved my sexual interest but not did use verbal communication, such as setting up an ambiance that suggested certain behavior.” The measure was reliable ($\alpha = .82$). Scores from the three questions were computed into a composite score representing likelihood to engage in indirect-nonverbal message forms ($M = 2.75$, $SD = 1.56$). Higher scores indicated greater likelihood to engage in direct-verbal message forms if they were to disclose in the future.

Participants who reported that they have self-disclosed their sexual desire to their current partner were prompted with the following: *“Once again, think back to when you self-disclosed your sexual desire to your partner. Please indicate how well the following statements describe how you disclosed your sexual desire to your partner on a scale from 1 (highly dissimilar) to 7 (highly similar)?”* For verbal-direct disclosures, the three items were as follows: “I verbally told my partner my sexual desire directly, such as ‘I am interested in this’”; “I verbally told my partner my sexual desire directly, such as ‘I want to try this’”; and “I verbally asked my partner about my sexual desire directly, such as ‘Would you want to try this?’”

For verbal-indirect disclosures, the four items were “I made a verbal comment about the sexual desire to my partner but did not say that I personally was interested, such as ‘Have you heard about this sexual desire?’”; “I made a verbal comment about the sexual desire to my partner but did not say that I personally was interested, such as ‘What do you think of this sexual desire?’”; “I brought up the sexual desire in general, such as, ‘The characters in the movie did this’”; and “I verbally made a joke about the sexual desire, such as, ‘Wouldn’t it be funny if we tried that?’”

For nonverbal-direct disclosures, the three items were as follows: “I indicated my sexual desire through nonverbal behavior by showing my partner an object that I would want to use during sex”; “I indicated my sexual desire through nonverbal behavior, such as using my hands to gesture to do something”; and “I indicated my sexual desire through nonverbal behavior, such as guiding my partner to a specific behavior.” For nonverbal-indirect disclosures, the three items were “I indicated my sexual desire by doing something that involved my sexual interest but not did use verbal communication, such as leaving up a video on a computer that involved the behavior; “I indicated my sexual desire by doing something that involved my sexual interest but

not did use verbal communication, such as wearing (or not wearing) certain articles of clothing”; and “I indicated my sexual desire by doing something that involved my sexual interest but not did use verbal communication, such as setting up an ambiance that suggested certain behavior.”

Unlike the likely message form that those who had not yet disclosed might use, participants who had disclosed could report the specific way that they communicated their sexual desire to their partner. So, rather than the mean for the three items in each scale, the highest score from within each set of item sets (verbal-direct, verbal-indirect, nonverbal-direct, and nonverbal-indirect) was used to represent that category. If, for example, a participant reported a one (on a seven-point scale), a four, and a seven on the three items within a specific subscale, such as nonverbal-indirect, the one item that they scored highest would best represent what they actually did. Because people can use more than one form, or they can use a combination of forms, participants had scores for each of the four message types (but for only one specific message within each category). Rather than having participants provide a qualitative response (via open response), this procedure allowed the variable to be measured as continuous variable and analyzed through structural equation modeling (SEM).

Demographic Information. At the end of the questionnaire, participants were asked to report their age, gender identity (man/trans* man, woman/trans* woman, non-binary, queer, other), race/ethnicity (Check all that apply: Asian or Asian American, Black or African-American, Caucasian/White, Latino/Latina/Hispanic, Native American/American Indian/Alaskan Native, Don't Know, Other/Not Listed), disability status (none, ambulatory difficulty, cognitive difficulty, hearing difficulty, independent living difficulty, self-care difficulty, vision difficulty), and sexuality (heterosexual, homosexual, bisexual, queer, pansexual, asexual, other).

In addition, participants were asked their current relationship type (casual, friends with benefits, dating, living together but not married, married, it's complicated, I am not in a current relationship, and other [please signify the type of relationship you have]). Given that the participation call required all participants to be in a current ongoing romantic and/or sexual relationship, this allowed a check on the validity of their participation. The researcher removed any participant who self-reported that they were not in a current relationship, which resulted in four participants being removed. Finally, participants answered two questions addressing their sexual history: (1) Are you currently sexually active (Yes/No)? and (2) What is the number of sexual partners that you have had, including the current one, if relevant (entering a number).

Chapter Three: Data Analysis and Results

Following and extending the modeling done by Greene and colleagues (2012), three primary models or model sets (for the four message forms) were analyzed based on whether or not participants reported having disclosed a sexual desire to a partner. The first model focused on how likely participants who reported not having disclosed their sexual desire (i.e., the undisclosed) would be to potentially do so in the future and tested hypotheses H_{1a-18a}. The second set of models centered on how likely the undisclosed are to enact specific forms of message based on channel (i.e., verbal or nonverbal) and directness (i.e., direct and indirect). They tested hypotheses H_{1b-18b}. The third model set involved the participants who reported having previously disclosed their sexual desire (i.e., the disclosed) and the message forms they used to disclose. The third set of models tested hypotheses H₁₉₋₃₆. Tables 1 and 2 present the zero-order correlation matrices for variables in the models.

Table 1. *Zero-Order Correlation Matrix for All Undisclosed Variables; * significant at $p < .01$; ** significant at $p < .001$.*

	1	2	3	4	5	6	7	8	9
1. Anticipated Stigma	---								
2. Anticipated Response	-.66**	---							
3. Anticipated Outcome	-.68**	.75**	---						
4. Relational Quality	-.35**	.33**	.20	---					
5. Sexual Communal Strength	-.42**	.55**	.43**	.61**	---				
6. Disclosure Efficacy	-.47**	.67**	.63**	.37**	.46**	---			
7. Comfort w/ Sexual Comm	-.34**	.54**	.48**	.57**	.63**	.79**	---		
8. Message Preparation	.24*	-.30**	-.35**	.01	.35	-.31**	-.17	---	
9. Likelihood of disclosure	-.32**	.44**	.58**	.13	.12	.54**	.39**	-.26*	---

Table 2. Zero-Order Correlation Matrix for All Disclosed Variables; * significant at $p < .01$; ** significant at $p < .001$.

	1	2	3	4	5	6	7	8	9
1. Anticipated Stigma	---								
2. Anticipated Response	-.60**	---							
3. Anticipated Outcome	-.69**	.66**	---						
4. Relational Quality	-.31**	.27**	.25**	---					
5. Sexual Communal Strength	-.30**	.34**	.33**	.61**	---				
6. Disclosure Efficacy	-.55**	.63**	.63**	.51**	.48**	---			
7. Comfort w/ Sexual Comm	-.31**	.40**	.34**	.57**	.63**	.67**	---		
8. Message Preparation	.28**	-.28**	-.34**	.00	-.02	-.21*	-.00	---	
9. Direct Verbal Disclosure	-.20*	.12	.20*	.20	.16	.31**	.24**	-.11	---

The models were tested using SEM modeling with maximum likelihood estimation using the “semTools” and “lavaan” packages in R Studio. Previous studies testing the DD-MM found SEM and path analyses to reveal strong model fits (e.g., Cranmer & LaBelle, 2018; Greene et al., 2012; Kuchenbecker & Bevan, 2023). Four goodness-of-fit indices estimate the fit of the models. The χ^2/df adjusts the χ^2 for sample size. The CFI calculates the ratio of noncentrality parameter estimate of the hypothesized model to the noncentrality parameter estimate of a baseline model. The RMSEA accounts for errors of approximation in the population. The TLI is an incremental fit index that is not affected significantly by the sample size (Gerbing & Anderson, 1992). Model fit was assessed using a χ^2/df less than 3, CFI equal to or greater than .90, RMSEA equal to or lower than .08, and TLI above .90 to .95 (Schumacker & Lomax, 2016).

Recent research has discussed the “reliability paradox,” which describes that more commonplace statistical modeling tools might not be well-suited for advancing theories of individual differences (Haines et al., 2020; Hedge et al., 2017), specifically related to structural models (Hancock & Mueller 2011; Yuan et al., 2015). As a consequence, more complex models, such as those presented in the current study, might be hindered by number of paths or sample size (Peugh & Feldon, 2020; Sivo et al., 2006); however, model fit indices are still the norm within the community of interpersonal communication scholars.

In line with recent SEM and path analyses of the DD-MM, the current study had two sample groups: 130 participants who did not disclose and 192 participants who disclose. In the original testing of the model, Greene and colleagues (2012) had a sample size of 183. Choi and colleagues (2016), who added in the message preparation phase, had a sample size of 204. The most recent publication that used SEM to test the DD-MM had a sample size of 162 (Park et al., 2023).

Given that the two undisclosed models included the same set of paths but had different outcome variables (i.e., likelihood to disclose or message form), the only difference in each of the models are the hypothesized relationships between a factor and the specific outcome variable. To avoid repetition, the results among all factors are presented for the first model of each set, and only specific relationships between factors and the different outcome variables are reported in subsequent models.

Results

Exploratory and Descriptive Analyses

As noted, of the overall sample, 39.9% ($n = 130$) reported having not disclosed their sexual desire to their current partner, whereas 60.1% ($n = 196$) of participants reported that they had disclosed. An independent samples t-test showed that undisclosed participants were less comfortable with sexual communication ($M = 4.3$, $SD = 1.6$) than were disclosed participants ($M = 5.7$, $SD = 1.3$; $F = 13.4$, $p < .001$). Those who had not disclosed reported direct-verbal forms as the most likely to use in the future if they were to disclose ($M = 4.8$, $SD = 1.5$), with indirect-verbal forms the second most likely ($M = 3.9$, $SD = 1.6$), followed by direct-nonverbal forms ($M = 3.4$, $SD = 1.7$) and then indirect-nonverbal forms ($M = 2.7$, $SD = 1.6$). This order aligns with the disclosed reports on their use of message forms. As noted, disclosed participants indicated

the channel and directness of the messages they used when self-disclosing on 13 items, each of which included example statements for each of the four message types. Participants rated each item on its similarity to their own disclosure, using an interval scale from 1 (highly dissimilar) to 7 (highly similar).

To categorize the primary message they used, a score above 4 (neither similar nor dissimilar) indicated that they had used a message type. The message forms they reported using (i.e., on which they scored above 4 on at least one example) were as follows: 91.3% direct-verbal messages, 46.4% indirect-verbal messages, 24.2% direct-nonverbal messages, and 21.9% an indirect-nonverbal messages. As for how their partner responded to their disclosure, 60.7% reported that their partner supported them, 25.5% reported that their partner was hesitant, and 5.6% reported that their partner would not support the enactment of their sexual desire, with two participants reporting that their partner did not respond or say anything, and one partner reporting that they were unsure how their partner reacted.

Participants were asked to report their sexual desire involved in their decision-making process to self-disclose or not, which were coded by the researcher into six categories: (1) an intrapersonal desire (i.e., a behavior that involved only themselves); (2) an interpersonal desire (i.e., something between them and their partner such as anal sex, more kissing, dirty talk); (3) an extradyadic desire (i.e., something involving a third or more people outside of the relationship such as a threesome or group sex); (4) a public desire (i.e., not directly involving other people, but with the potential to be viewed, such as having sex in a public restroom or an outside park); (5) other or was unclear (e.g., “librarian”); and (6) no response.

Across participants, 73.0% reported a sexual desire that was interpersonal, 17.5% reported a desire that was extradyadic, 3.4% reported a desire that involved being in public; 1.5%

listed a desire that was unclear; 4.3% did not directly specifying a sexual desire, and one participant did not include any information. No participant reported any sexual desire that was intrapersonal. On a Likert scale from 1 (very unimportant) to 7 (very important), for how important their sexual desire was to them, participant scores had a mean of 4.62 ($SD = 1.55$), suggesting that the desire was somewhat important for them. For those who had disclosed, 88.3% responded that they did so face-to-face with their partner, whereas 11.7% reported using computer-mediated methods (e.g., text, phone call).

Model One: Undisclosed Likelihood of Disclosure

The initial hypothesized undisclosed likelihood to disclose model using the full range of indicators was an unsatisfactory fit for the data, $\chi^2 (1,690) = 3,689.74$, $CFI = .74$, $TLI = .73$, $RMSEA = .10$. One explanation for this might be that as measurement models increase (i.e., more indicators), the degrees of freedom also increase, which can negatively influence fit indices' sensitivity to detect structural model misspecification (McDonald & Ho, 2002; Tomarken & Waller, 2003). To address this, confirmation factor analyses were conducted on the eight latent variables of the measurement model to identify which item indicators provided the lowest levels of variance per factor and thus might be removed to improve the overall measurement model fit.

Of the model fit indices, the Standardized Root Mean Squared Residual (SRMR), which is the difference between the observed correlation and the model implied correlation matrix, has been argued to best estimate for the number of indicators that should remain within a factor that falls under .08 (Montoya & Edwards, 2021; Pavlov et al., 2020). For the SRMR to be calculated, at least four item indicators must remain, so long as the SRMR is below .08.

After removing nine items that provided the lowest factor loadings from the anticipated stigma latent factor, the anticipated stigma measurement model improved from an SRMR = .09 to an SRMR = .01. After removing eight items that provided the lowest factor loadings from the anticipated response latent factor, the anticipated response measurement model improved from an SRMR = .17 to an SRMR = .03. After removing two items that provided the lowest factor loadings from the anticipated outcome latent factor, the anticipated outcome measurement model improved from an SRMR = .08 to an SRMR = .06. After removing four items that provided the lowest factor loadings from the relational quality latent factor, the relational quality measurement model improved from an SRMR = .05 to an SRMR = .03. After removing two items that provided the lowest factor loadings from the sexual communal strength latent factor, the sexual communal strength measurement model improved from an SRMR = .05 to an SRMR = .02. After removing three items that provided the lowest factor loadings from the comfort with sexual communication latent factor, the comfort with sexual communication measurement model improved from an SRMR = .03 to an SRMR = .01.

After the confirmatory factor analyses were conducted, the 58 item indicators were reduced to 31 item indicators making up the eight latent variables. The model was then rerun and was found to be a good fit for the data, $\chi^2(475) = 849.15$, CFI = .91, TLI = .90, RMSEA = .08.

Information Assessment

The first factor of the DD-MM focused on information assessment, and H1_a was supported, such that higher perceptions that participants' belief that their sexual desire was stigmatized predicted less certainty in anticipated response ($\beta = -.54$, $p < .001$). H2_a and H3_a, however, were not supported. Perceptions that participants' belief that their sexual desire was

stigmatized did not predict either certainty of any positive relational outcomes if they were to disclose ($\beta = .04, p = .54$) or their efficacy in disclosing ($\beta = -.05, p = .57$).

Receiver Assessment

For the second set of factors of the DD-MM that focused on receiver assessment, H4_a was supported, such that certainty in anticipated response predicted certainty in anticipated outcome ($\beta = .91, p < .001$), which in turn predicted disclosure efficacy ($\beta = .50, p < .001$; H7_a). H5_a, which hypothesized that anticipated response would predict likelihood to disclose, was not supported ($\beta = -.28, p = .41$); however, as hypothesized (H6_a), anticipated outcome positively predicted likelihood to disclose ($\beta = .81, p < .05$).

Relational quality negatively predict anticipated response ($\beta = -.19, p < .05$), counter to H8_a, therefore, the hypothesis was not supported. Relational quality did not predict either disclosure efficacy ($\beta = .07, p = .39$) nor comfort with sexual communication ($\beta = .05, p = .53$); thus, H10_a and H14_a were not supported.

Sexual communal strength positively predicted anticipated response ($\beta = .52, p < .001$), disclosure efficacy ($\beta = .33, p < .001$), and comfort with sexual communication ($\beta = .72, p < .001$), thus, H9_a, H11_a, and H13_a were all supported. Contrary to the hypothesized direction, however, sexual communal strength negatively predicted the likelihood to disclose in the future ($\beta = -.55, p < .001$); thus, H12_a was not supported.

Discloser Efficacy

For the third set of factors of the DD-MM, both comfort with sexual communication ($\beta = .35, p < .01$) and discloser efficacy ($\beta = .30, p < .05$) positively predicted the likelihood to disclose; thus H15_a and H16_a were supported. The more comfortable participants were to discuss

sexual topics and the more confident they were in their ability to disclose (i.e., efficacy), the more likely they were to report potentially disclosing in the future.

Message Preparation

The fourth factor of the DD-MM focused on message preparation for planning and scheduling. H17_a was supported in that disclosure efficacy negatively predicted message preparation ($\beta = -.35, p < .001$). The more confident individuals were in their ability to disclose (i.e., efficacy), the less likely they were to both plan and schedule a future disclosure. The final hypothesis for this model, H18_a, was not supported, in that message preparation did not predict the likelihood of a future disclosure ($\beta = -.07, p = .40$) (see Figure 4).

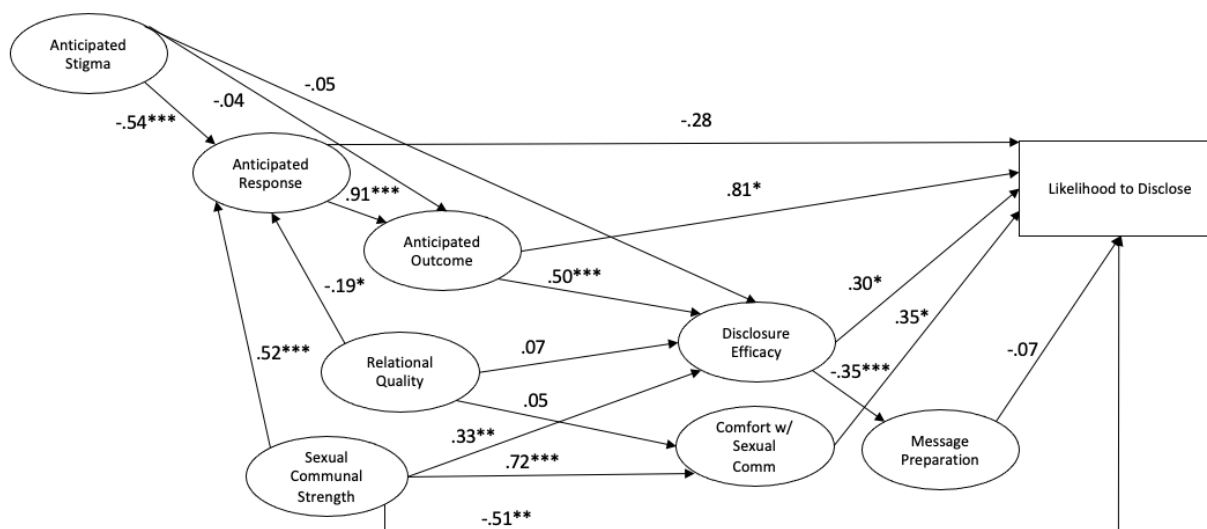


Figure 4. Results of SEM for Likelihood to Disclose for the Undisclosed; * $p < .05$, ** $p < .01$, *** $p < .001$

Model Summary

Three hypothesized factors positively predicted likelihood to disclose: anticipated outcome (H_{6a}), disclosure efficacy (H_{16a}), and comfort with sexual communication (H_{15a}). In addition, sexual communal strength predicted likelihood to disclose, but in the opposite direction

hypothesized (i.e., negative; H_{12a}). A list of these findings can be found in Table 3. See Appendix D for full SEM results output.

Table 3. *Significant Findings for Likelihood to Disclose for the Undisclosed; → indicates predictor, +/- indicates direction*

Information Assessment
Anticipated stigma → Anticipated Response (-)
Receiver Assessment
Anticipated Response → Anticipated Outcome (+)
Anticipated Outcome → Disclosure Efficacy (+); Likelihood to Disclose (+)
Relational Quality → Anticipated Response (-)
Sexual Communal Strength → Anticipated Response (+); Disclosure Efficacy (+); Comfort with Sexual Communication (+); Likelihood to Disclose (-)
Discloser Efficacy
Comfort with Sexual Communication → Likelihood to Disclose (+)
Disclosure Efficacy → Message Preparation (-); Likelihood to Disclose (+)
Message Preparation
None

Model Set Two: Undisclosed Likelihood of Message Directness and Channel

With the potential for four message forms (i.e., direct-verbal, indirect-verbal, direct-nonverbal, and indirect-nonverbal), four sets of analyses were conducted using SEM modeling (R Studio).

Direct-verbal

The initial hypothesized undisclosed likelihood to use direct-verbal forms model using the full range of indicators was an unsatisfactory fit for the data, $\chi^2 (1,748) = 3,792.01$, CFI =

.74, TLI = .72, RMSEA = .10, SRMR = .10. To improve model fit, and because the direct-verbal model was tested on the same sample of participants (i.e., the undisclosed), involved the same hypothesized paths, and only differed on the exogenous variable (i.e., likelihood to use direct-verbal messages), the same 31 item indicators making up the eight latent variables were used from the CFA results that were conducted for the likelihood to disclose in the future model. In addition, model fit indices tests suggested that one path be included across all models: comfort with sexual communication predicting disclosure efficacy. These new latent factors and path were used for an updated SEM. The model was then rerun and was found to be a good fit for the data, with all criteria being met, $\chi^2(505) = 848.08$, CFI = .92, TLI = .91, RMSEA = .07.

H_{5b}, which stated that higher certainty for anticipated response would positively predict greater likelihood to use direct-verbal message forms in the future if they chose to disclose, was supported ($\beta = .82, p < .05$). On the other hand, H_{6b} anticipated outcome, ($\beta = -.39, p = .31$), H_{12b} sexual communal strength ($\beta = -.29, p = .06$), H_{15b} comfort with sexual communication ($\beta = .27, p = .16$), H_{16b} disclosure efficacy ($\beta = .19, p = .37$), and H_{18b}, message preparedness ($\beta = .10, p = .26$) were not supported, as they did not predict the likelihood of using direct-verbal message forms significantly (Figure 5a).

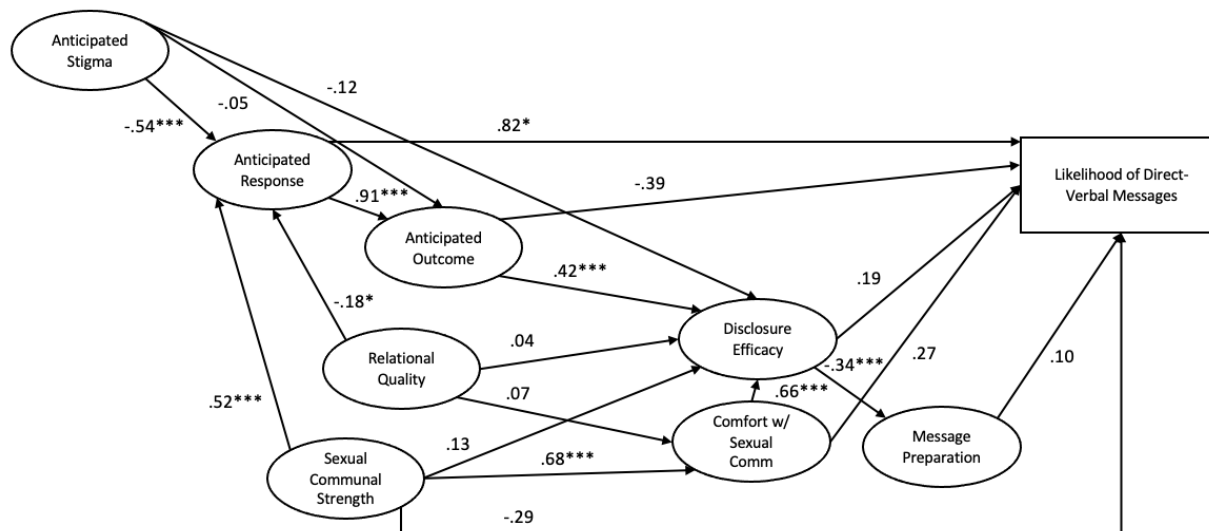


Figure 5a. Results of SEM for Likelihood to Use Direct-verbal Messages for the Undisclosed; * $p < .05$, ** $p < .01$, *** $p < .001$

Indirect-verbal

The initial hypothesized undisclosed likelihood to use indirect-verbal forms model using the full range of indicators was an unsatisfactory fit for the data, $\chi^2(1,808) = 3,923.85$, CFI = .73, TLI = .72, RMSEA = .10, SRMR = .10. To improve model fit, the item indicators were reduced to the same 31 as the direct-verbal model, and then model fit indices tests suggested that one path be included: comfort with sexual communication predicting disclosure efficacy. These new latent factors and paths were used for an updated SEM. The model was then rerun and was found to be a good fit for the data, with all criteria being met, $\chi^2(538) = 917.61$, CFI = .90, TLI = .90, RMSEA = .07.

H_{5b} hypothesized that greater certainty in anticipated response from their partner predicted greater likelihood to use indirect-verbal message forms if they chose to disclose in the future. The opposite was found, however. Anticipated response was a negative predictor ($\beta = -1.05$, $p < .05$), and the hypothesis was not supported. Instead, the less certainty around the

anticipated response to a disclosure, the more likely individuals were to report likelihood to use indirect-verbal forms in the future.

Contrary to what occurred for anticipated response, anticipated outcome positively predicted the likelihood to use indirect-verbal forms ($\beta = 1.18, p < .05$), and H_{6b} was supported. The higher certainty individuals perceived of any positive relational outcomes following a potential disclosure, the more likely they were to report a likelihood to use indirect-verbal messages. H_{12b} , H_{15b} , H_{16b} , and H_{18b} were not supported, such that sexual communal strength ($\beta = -.08, p = .62$), comfort with sexual communication ($\beta = .37, p = .08$), disclosure efficacy ($\beta = -.19, p = .40$), and message preparation ($\beta = .19, p = .06$) did not predict the likelihood of using indirect-verbal forms. The additional path, which was suggested by the model fit indices, revealed that comfort with sexual communication positively predicted disclosure efficacy ($\beta = .66, p < .01$) (Figure 5b).

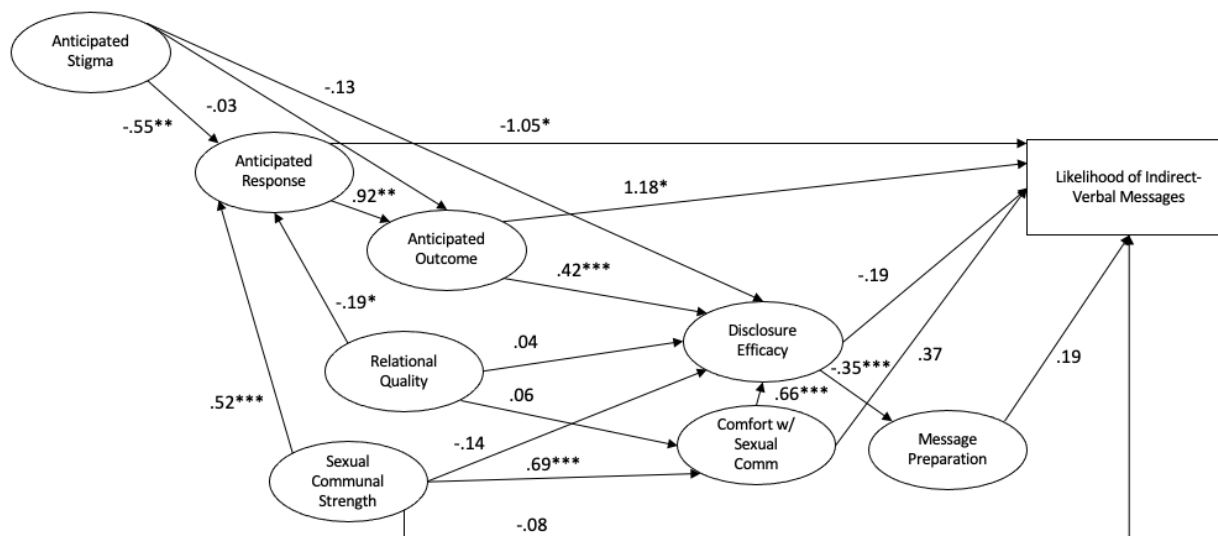


Figure 5b. Results of SEM for Likelihood to Use Indirect-verbal Messages for the Undisclosed; * $p < .05$, ** $p < .01$, *** $p < .001$

Direct-nonverbal

The initial hypothesized undisclosed likelihood to use direct-nonverbal forms model using the full range of indicators was an unsatisfactory fit for the data, $\chi^2 (1,748) = 3,758.48$, CFI = .74, TLI = .73, RMSEA = .10, SRMR = .11. To improve model fit, the same steps were taken for the direct-verbal and indirect-verbal models. These new latent factors and paths were used for an updated structural model. The model was then rerun and was found to be a good fit for the data, with all criteria being met, $\chi^2 (505) = 868.50$, CFI = .91, TLI = .91, RMSEA = .08.

None of the six hypothesized predictors were found to be predict future use of direct-nonverbal message forms. Thus, H_{5b}, H_{6b}, H_{12b}, H_{15b}, H_{16b}, and H_{18b} were not supported: Anticipated response ($\beta = -.23, p = .57$), anticipated outcome ($\beta = .31, p = .45$), sexual communal strength ($\beta = .07, p = .66$), comfort with sexual communication ($\beta = -.18, p = .39$), disclosure efficacy ($\beta = .35, p < .12$), and message preparation ($\beta = .08, p = .44$) did not predict the likelihood to use direct-nonverbal forms if an individual were to disclose their sexual desire in the future. The additional path, which was suggested by the model fit indices, reflected that comfort with sexual communication positively predicted disclosure efficacy ($\beta = .66, p < .001$) (Figure 5c).

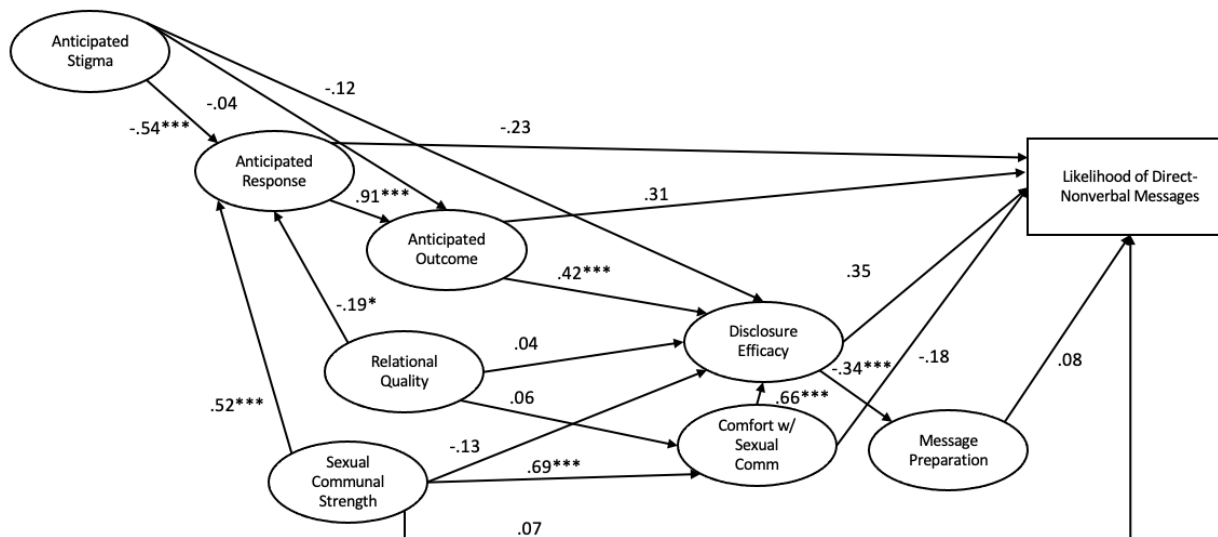


Figure 5c. Results of SEM for Likelihood to Use Direct-nonverbal Messages for the Undisclosed; * $p < .05$, ** $p < .01$, *** $p < .001$

Indirect-nonverbal

The initial hypothesized undisclosed likelihood to use indirect-nonverbal forms model using the full range of indicators was an unsatisfactory fit for the data, $\chi^2(1,748) = 3,757.86$, CFI = .74, TLI = .73, RMSEA = .10, SRMR = .10. To improve model fit, the same steps were taken for the direct-verbal, indirect-verbal, and direct-nonverbal models. These new latent factors and paths were used for an updated structural model. The model was then rerun and was found to be a good fit for the data, with all criteria being met, $\chi^2(505) = 844.73$, CFI = .92, TLI = .91, RMSEA = .07.

Of the six hypothesized predictors, none had significant relationships with the likelihood to use indirect messages in the future. Anticipated response ($\beta = -.22$, $p = .60$; H_{5b}), anticipated outcome ($\beta = .42$, $p = .34$; H_{6b}), sexual communal strength ($\beta = .02$, $p = .93$; H_{12b}), comfort with sexual communication ($\beta = -.06$, $p = .79$; H_{15b}), disclosure efficacy ($\beta = .13$, $p = .58$; H_{16b}), and

message preparation ($\beta = .14, p = .19; H_{18b}$) did not predict likelihood to use indirect messages in the future (Figure 5d).

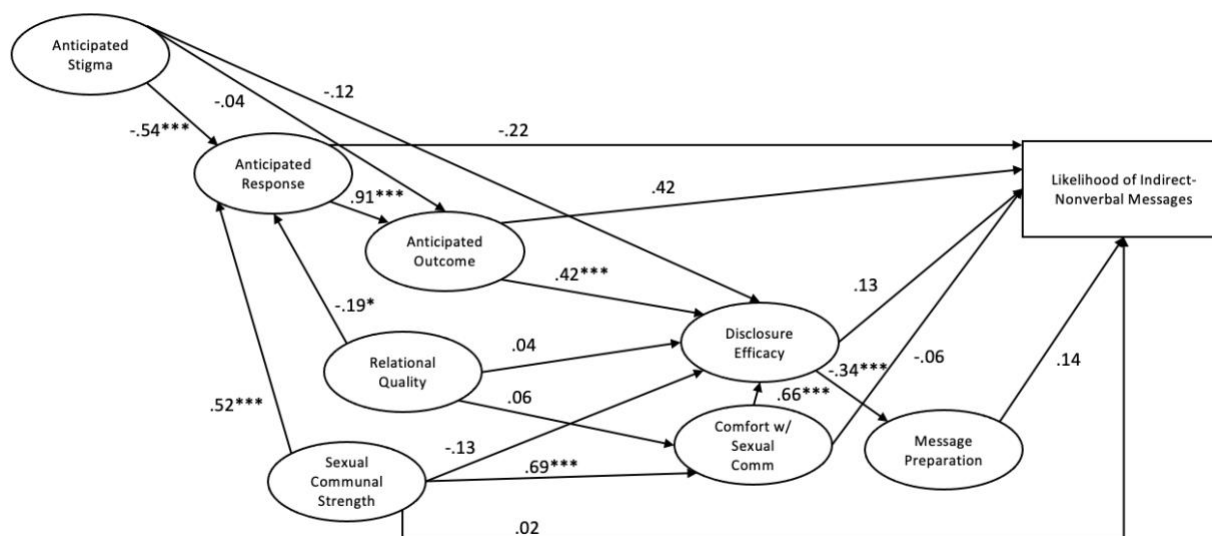


Figure 5d. Results of SEM for Likelihood to Use Indirect-nonverbal Messages for the Undisclosed; * $p < .05$, ** $p < .01$, *** $p < .001$

Summary of Models

Both comfort with anticipated response (H_{5b}) and sexual communication (H_{15b}) positively predicted the likelihood to use direct-verbal disclosure forms. Both anticipated response (negatively; H_{5b}) and anticipated outcome (positively; H_{6b}) predicted the likelihood of using indirect-verbal disclosure forms. No predictors significantly predicted the likelihood to use nonverbal message forms if participants were to disclose in the future. A list of these findings can be found in Table 4. See Appendix D for full SEM results output.

Table 4. *Significant Findings for Likelihood of Message Forms for the Undisclosed; → indicates predictor, +/- indicates direction*

Direct Verbal	Anticipated Response → Likelihood to Use (+)
Indirect Verbal	Anticipated Response → Likelihood to Use (-)
	Anticipated Outcome → Likelihood to Use (+)
Direct Nonverbal	None
Indirect Nonverbal	None

Model Set Three: Disclosed Message Forms

As there were four types of message forms (i.e., direct-verbal, indirect-verbal, direct-nonverbal, and indirect-nonverbal), four models were tested. Given that the set of models for the disclosed were all proposed with the same path relationships but with different outcome variables (i.e., message form), the main differences in each of the models are any hypothesized relationships between a factor and the specific message form. To avoid repeating results, the results for all factors are presented for the first model, and only specific relationships between factors and the different outcome variables are reported thereafter.

Direct-verbal

The initial hypothesized use of direct-verbal forms for the disclosed model using the full range of indicators showed an unsatisfactory fit for the data, with two out of the four criteria being met, $\chi^2(1,748) = 4,032.6$, CFI = .75, TLI = .74, RMSEA = .08, SRMR = .09. To improve the model, confirmatory factor analyses were conducted on the eight latent variables of the measurement model to identify which item indicators provided the lowest levels of variance per factor and thus might be removed to improve the overall measurement model fit.

After removing nine items from the anticipated stigma latent factor, the anticipated stigma measurement model improved from an SRMR = .07 to an SRMR = .02. After removing eight items from the anticipated response latent factor, the anticipated response measurement model improved from an SRMR = .08 to an SRMR = .03. After removing two items from the anticipated outcome latent factor, the anticipated outcome measurement model improved from an SRMR = .12 to an SRMR = .06. After removing four items from the relational quality latent factor, the relational quality measurement model improved from an SRMR = .05 to an SRMR = .03. After removing two items from the sexual communal strength latent factor, the sexual communal strength measurement model improved from an SRMR = .05 to an SRMR = .02. After removing three items from the comfort with sexual communication latent factor, the comfort with sexual communication measurement model improved from an SRMR = .03 to an SRMR = .01.

After the confirmatory factor analyses were conducted, 58 item indicators were reduced to 31 item indicators making up the eight latent variables. In addition, model fit indices tests suggested that three paths be included across all models: (1) anticipated outcome predicting message preparation and comfort with sexual communication predicting both (2) disclosure efficacy and (3) message preparation. These new latent factors and paths were used for an updated structural model. The model was then rerun and was found to be a good fit for the data, with all criteria being met, $\chi^2(503) = 965.42$, CFI = .91, TLI = .90, RMSEA = .07.

Information Assessment. For the first factor of the DD-MM that focuses on information assessment, anticipated stigma was found to be negatively predictive of both anticipated response ($\beta = -.42, p < .001$) and anticipated outcome ($\beta = -.52, p < .001$); therefore, H₁₉ and H₂₀

were supported. Anticipated stigma did not predict disclosure efficacy ($\beta = .11, p = .17$), so H₂₁ was not supported.

Receiver Assessment. For the second set of factors of the DD-MM focusing on receiver assessment, H₂₂, which stated that anticipated response will predict anticipated outcome, was supported ($\beta = .42, p < .001$), which itself predicted disclosure efficacy ($\beta = .73, p < .001$; H₂₃). Contrary to H₂₄, anticipated response was found to negatively predict likelihood to have used a direct-verbal form ($\beta = -.31, p < .05$). The more certain individuals were about their partner's response prior to disclosing, the less likely they were to use a direct-verbal form. H₂₅, which predicted that anticipated outcome would positively predict likelihood to use direct-verbal forms, was not supported ($\beta = .24, p = .35$). The first path added to the model, as suggested by the model fit indices, revealed that anticipated outcome negatively predicted message preparation ($\beta = -.47, p < .01$).

Relational quality did not predict anticipated response ($\beta = -.15, p = .23$; H₂₆) nor comfort with sexual communication ($\beta = .17, p = .05$; H₃₀), but it positively predicted disclosure efficacy ($\beta = .21, p < .05$; H₂₈). Sexual communal strength positively predicted both anticipated response ($\beta = .27, p < .05$; H₂₇) and comfort with sexual communication ($\beta = .67, p < .001$; H₃₁); however, sexual communal strength did not predict either disclosure efficacy ($\beta = -.04, p = .69$; H₂₉) or use of direct-verbal forms ($\beta = .03, p = .87$; H₃₂).

Discloser Efficacy. For the third factor of the DD-MM, disclosure efficacy was not found to predict the likelihood to have used direct-verbal forms ($\beta = .35, p = .24$; H₃₅) or message preparation ($\beta = -.03, p = .91$; H₃₄). In addition, comfort with sexual communication ($\beta = -.01, p = .95$; H₃₃) did not predict the likelihood to have used direct-verbal forms. The second path added to the model, as suggested by the model fit indices, showed that comfort with sexual

communication positively predicted disclosure efficacy ($\beta = .39, p < .001$). The third path added to the model, as suggested by the model fit indices, revealed that comfort with sexual communication did not predict message preparation ($\beta = .26, p = .007$).

Message Preparation. For the fourth factor of the DD-MM that focused on message preparation, H_{36} was not supported. Time spent preparing a message ($\beta = -.01, p = .90$) did not predict the use of direct-verbal forms (see Figure 6a). A list of these findings can be found in Table 5.

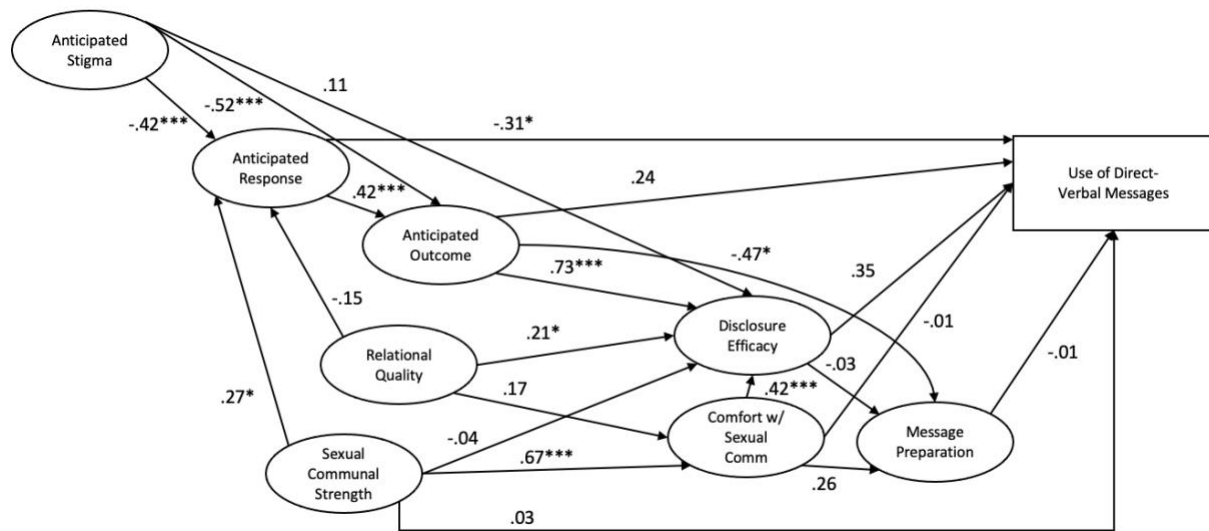


Figure 6a. Results of SEM for Use of Direct-verbal Messages for the Disclosed; $*p < .05$,

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

Table 5. *Significant Findings for DD-MM Phases for the Disclosed; → indicates predictor, +/- indicates direction*

Information Assessment
Anticipated stigma → Anticipated Response (-); Anticipated Outcome (-)
Receiver Assessment
Anticipated Response → Anticipated Outcome (+)
Anticipated Outcome → Disclosure Efficacy (+)
Relational Quality → Disclosure Efficacy (+)
Sexual Communal Strength → Anticipated Response (+); Comfort with Sexual Communication (+)
Discloser Efficacy
Comfort with Sexual Communication → Disclosure Efficacy (+)
Message Preparation
None

Indirect-verbal

The initial hypothesized use of indirect-verbal forms for the disclosed model using the full range of indicators showed an unsatisfactory fit for the data, with only two out of the four criteria being met, $\chi^2(1,748) = 3,985.39$, CFI = .76, TLI = .75, RMSEA = .08, SRMR = .09. To improve model fit, the same steps were taken for the direct-verbal model. These new latent factors and paths were used for an updated structural model. The model was then rerun and was found to be a good fit for the data, with all criteria being met, $\chi^2(503) = 968.97$, CFI = .91, TLI = .90, RMSEA = .07.

None of the proposed hypotheses were supported, however, in that anticipated response ($\beta = .11$, $p = .37$; H₂₄), anticipated outcome ($\beta = -.41$, $p = .12$; H₂₅), sexual communal strength (β

= $-.11, p = .47$; H₃₂), comfort with sexual communication ($\beta = -.14, p = .49$; H₃₃), disclosure efficacy ($\beta = .28, p = .36$; H₃₅), and message preparation ($\beta = .16, p = .12$; H₃₆) did not predict having used indirect-verbal forms for those who had disclosed (see Figure 6b).

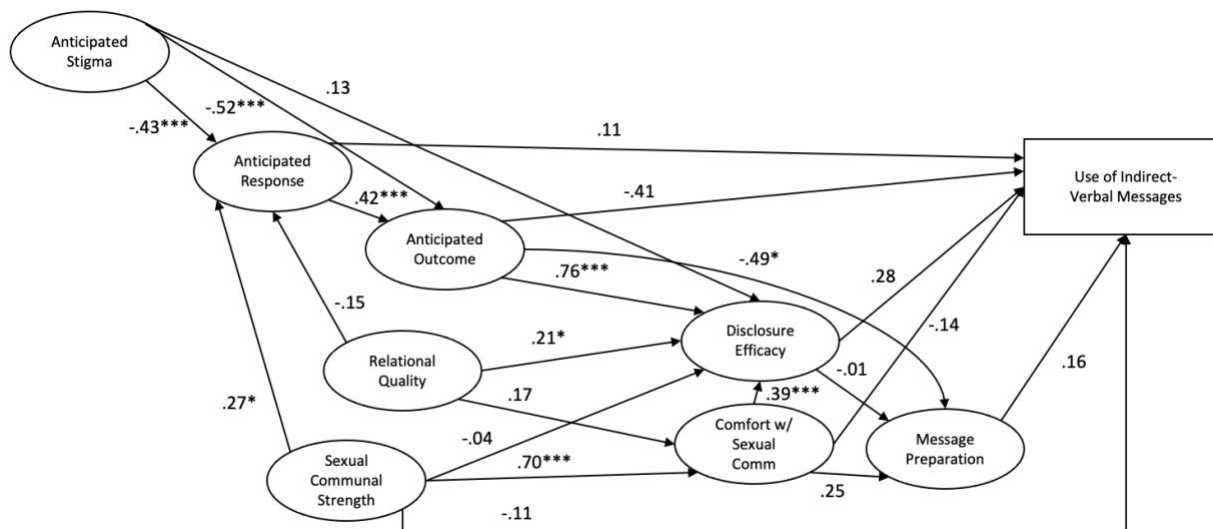


Figure 6b. Results of SEM for Use of Indirect-verbal Messages for the Disclosed; * $p < .05$, ** $p < .01$, *** $p < .001$

Direct-nonverbal

The initial hypothesized use of direct-nonverbal forms model for the disclosed using the full range of indicators showed an unsatisfactory fit for the data, with two out of the four criteria being met, $\chi^2(1,748) = 3,999.81$, CFI = .76, TLI = .75, RMSEA = .08, SRMR = .09. To improve model fit, the same steps were taken for the direct-verbal and indirect-verbal model. These new latent factors and paths were used for an updated structural model. The model was then rerun and was found to be a good fit for the data, with all criteria being met, $\chi^2(503) = 981.95$, CFI = .91, TLI = .90, RMSEA = .07.

Of the proposed hypotheses, both H₂₄ and H₃₆ were supported, such that both anticipated response ($\beta = .23, p < .05$; H₂₄) and message preparation ($\beta = .25, p < .01$) positively predicted

the use of indirect-verbal messages: The more time participants spent preparing their disclosure, the more likely they were to use indirect-verbal messages. Anticipated outcome ($\beta = -.12, p = .62$; H₂₅), sexual communal strength ($\beta = -.17, p = .22$; H₃₂), comfort with sexual communication ($\beta = -.05, p = .79$; H₃₃), or disclosure efficacy ($\beta = .00, p = .99$; H₃₅) did not predict use of direct-nonverbal message forms (see Figure 6c).

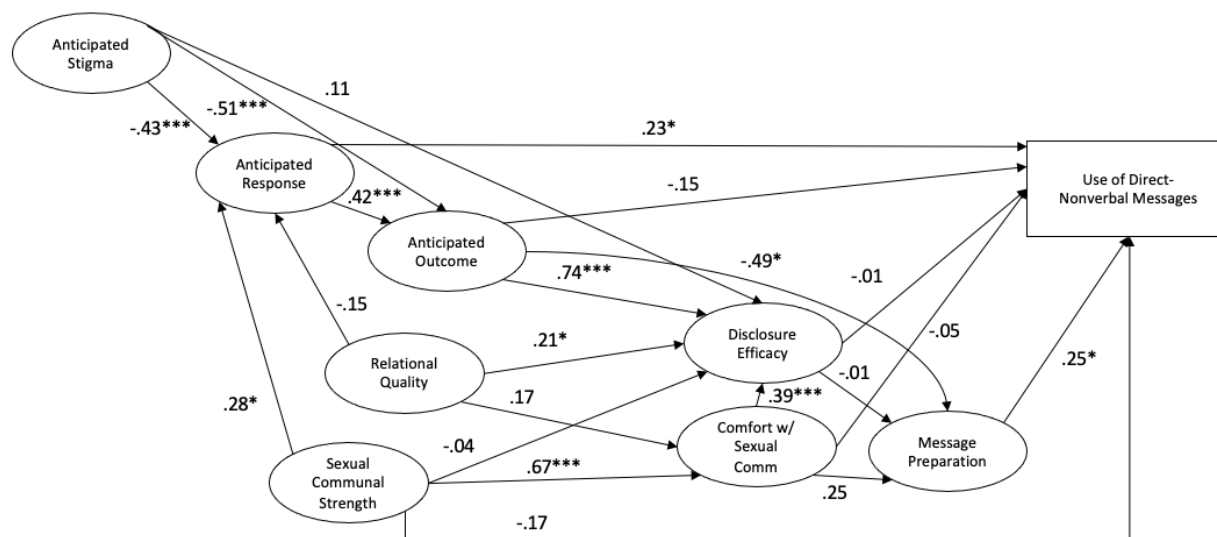


Figure 6c. Results of SEM for Use of Direct-nonverbal Messages for the Disclosed; $*p < .05$, $**p < .01$, $***p < .001$

Indirect-nonverbal

The initial hypothesized use of indirect-nonverbal forms model for the disclosed using the full range of indicators showed an unsatisfactory fit for the data, with two out of the four criteria being met, $\chi^2(1,748) = 3,999.81$, CFI = .76, TLI = .75, RMSEA = .08, SRMR = .09. To improve model fit, the same steps were taken for the direct-verbal, indirect-verbal, and direct-nonverbal models. These new latent factors, paths, and factor covariances were used for an updated structural model. The model was then rerun and found to be a good fit for the data, with all criteria being met, $\chi^2(501) = 965.61$, CFI = .91, TLI = .90, RMSEA = .07.

Of the proposed hypotheses, however, only H₃₆ was supported, with message preparation ($\beta = .31, p < .01$) positively predicting the use of indirect-verbal messages: The more time participants reported preparing their disclosure, the more likely they were to use indirect-nonverbal messages. Anticipated response ($\beta = .21, p = .07; H_{24}$), anticipated outcome ($\beta = -.33, p = .22; H_{25}$), sexual communal strength ($\beta = -.09, p = .53; H_{32}$), comfort with sexual communication ($\beta = -.15, p = .37; H_{33}$), nor disclosure efficacy ($\beta = .14, p = .67; H_{35}$) predicted use of indirect-nonverbal message forms (Figure 6d).

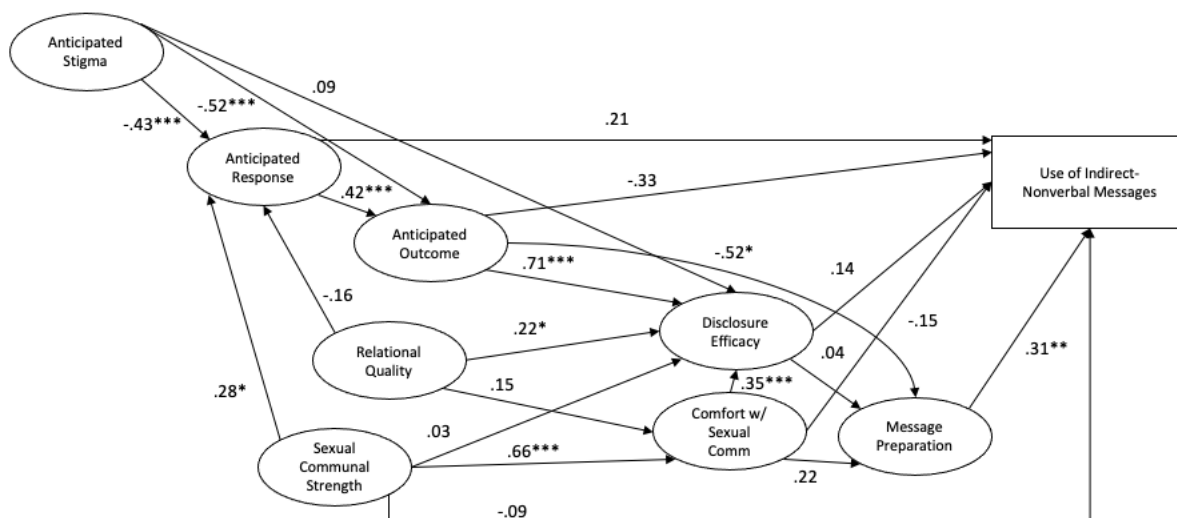


Figure 6d. Results of SEM for Use of Indirect-nonverbal Messages for the Disclosed; * $p < .05$, ** $p < .01$, *** $p < .001$

Summary of Models

Anticipated response (H₂₄) negatively predicted the use of direct-verbal message forms. There were no statistically significant predictors for the use of indirect-verbal message forms. For nonverbal message forms, anticipated response (H₂₄) predicted likelihood to use direct-nonverbal message forms, whereas message preparation (H₃₆) positively predicted both

likelihood to use direct-nonverbal message forms and indirect-nonverbal message forms. A list of these findings is in Table 6. See Appendix D for full SEM results output.

Table 6. *Significant Findings for the Use of Message Forms for the Disclosed; → indicates predictor, +/- indicates direction*

Direct Verbal	Anticipated Response → Likelihood to Use (-)
Indirect Verbal	None
Direct Nonverbal	Anticipated Response → Likelihood to Use (+)
	Message Preparation → Likelihood to Use (+)
Indirect Nonverbal	Message Preparation → Likelihood to Use (+)

Chapter Four: Discussion

The purpose of this dissertation was to apply the Disclosure Decision-making Model (Greene, 2009) to self-disclosure of sexual desires to (1) examine the factors that predict if individuals are likely to disclose to a current partner and, if they were to disclose, the likelihood that they would use particular message forms, and (2) reveal the factors that predict the nature of messages used to disclose for people who had already done so. The factors of the DD-MM included potential disclosers' assessment of the information (i.e., anticipated stigma), the receiver (i.e., anticipated response, anticipated outcome, relational quality, and sexual communal strength), their own efficacy (i.e., disclosure efficacy and comfort with sexual communication), and message preparation (i.e., planning and scheduling). The outcome variables were, for those who did not previously disclose, the likelihood to disclose in the future and to use specific message forms, and, for those who reported prior disclosure, the message forms they used. In doing so, it added to existing research using the DD-MM by applying the model to disclosure of sexual desires rather than health diagnoses. This dissertation was also a response to the call by Manning (2021) for more research on interpersonal sexual communication, specifically with a focus on how sexual partners discuss, or avoid, their sexual desires in face-to-face interaction.

A cross-sectional survey was completed by 326 participants who were recruited through Amazon Mechanical Turk and the University of Washington. Of these, 39.9% ($n = 130$) reported having not disclosed their sexual desire to their current partner, and 60.1% ($n = 196$) of participants reported that they had disclosed previously. The undisclosed reported that they were most likely to use direct-verbal messages ($M = 4.8$, $SD = 1.5$), followed by indirect-verbal messages ($M = 3.9$, $SD = 1.6$), direct-nonverbal messages ($M = 3.4$, $SD = 1.7$), and indirect-nonverbal messages ($M = 2.7$, $SD = 1.6$). For those who had disclosed, 91.3% reported that they

had used at least one direct-verbal message, 46.4% used at least one indirect-verbal message, 24.2% at least one direct-nonverbal message, and 21.9% used at least one indirect-nonverbal message.

Tests of three models (or model sets) found results consistent with, extensions of, and counter to the DD-MM's previous applications in the health context. Specifically, the findings provide insight into how individuals assess potentially sensitive information based on their own evaluation of the desire (i.e., anticipated stigma), their relationship with and characteristics of the person to whom they could or did disclose, and their abilities to communicate the information. In addition, the findings provide both descriptive and explanatory data on *how* individuals decided to disclose, *if* they chose to do so. The data helped identify the factors that predict both why individuals choose to disclose and explain why they might not, consistent with disclosure decision-making as a dynamic process (Greene, 2009).

The current study included participants who had gone through the decision-making process but not disclosed to their current partner and those who reported previously self-disclosing a sexual desire to a current partner. In this chapter, the findings and paths for each proposed model are first assessed in relation with Greene's (2009) original DD-MM findings and statistically significant paths between the phases. Next, assessments are made between the models in this study in order to explain the aspects of the decision-making process that may particularly influence decisions to disclose and the preferred way of doing so. The findings highlight the prominence and importance of the roles that both verbal and nonverbal communication play when individuals decide to disclose their sexual preferences to partners during interpersonal interactions.

Assessing Applications of the Disclosure Decision-Making Model

Greene first introduced the DD-MM in 2006, and since then the model has evolved to more fully explain the disclosure decision-making process (Choi et al., 2016; Greene et al., 2012; Lee & Greene, 2023). This dissertation included additional components (sexual communal strength and comfort with sexual communication) that were relevant to the nature of sexual self-disclosures, both of which played a role in the reported decision-making process for the participants in the present study. Direct comparisons between the models should be approached with caution, as the studies were conducted with different samples, included a few different predictors for the DD-MM phases, and were applied to different types of self-disclosures. Evaluations of these results with previous versions of the DD-MM are discussed next to test both the applicability and heuristic aspects of the DD-MM, as originally proposed by Greene et al. (2012), specifically on self-disclosures of sexual desires.

The Undisclosed Model

The undisclosed model in this study was both similar to and differed from the undisclosed model presented by Greene et al. (2012) in several ways. For both the current study and Greene et al.'s undisclosed models, anticipated response directly and negatively predicted anticipated outcome. As well, disclosure efficacy predicted the likelihood to disclose. These findings confirm some of Greene et al.'s proposed relationships between information assessment and receiver assessment and between discloser efficacy and likelihood to disclose.

The differences from her model emerged between receiver assessment components and discloser efficacy. The first difference between the undisclosed models was that, for the current study, anticipated stigma negatively predicted anticipated response but not anticipated outcome, whereas in Greene et al.'s model, the information assessment components (i.e., information

severity and relevancy) negatively predicted anticipated outcome, but did not reach statistical significance for anticipated response (although showed a negative direction). One explanation for this model difference might be that each study used a different variable to measure information assessment, with the current study using anticipated stigma and Greene et al. using information relevancy. Other studies have used different measures to test information assessment. Choi et al. (2016) developed their own measure for stigma and found that it did not predict anticipated response (but showed a positive direction). Kuchenbecker & Bevan (2023) adapted Mak and Cheung's (2008) Affiliate Stigma Scale stigma, Wong et al.'s (1994) Death Attitude Profile-Revised Scale assessing prognosis, and Vangelisti et al.'s (2001) Revealing Secret Scale assessing relevance and also found that stigma negatively predicted anticipated response. Pahwa et al. (2017) used Ritsher & Phelan's (2004) Internalized Stigma of Mental Illness scale and also found that higher stigma levels negatively predicted disclosure likelihood. To better understand information assessment, future research should be careful and exploratory when deciding what specific measures to use when referring to Greene's (2009) information assessment phase.

In addition, in the undisclosed model for current study, anticipated outcome had a direct effect on disclosure efficacy, whereas in Greene et al.'s (2012) test of the DD-MM, anticipated outcome had an indirect effect through confidence in response (not tested in the current study). As well, in this dissertation, anticipated outcome directly predicted the likelihood to disclose, a relationship Greene and colleagues did not find. Finally, in Greene et al.'s undisclosed model, relational quality positively predicted anticipated response, yet in the current study, relational quality *negatively* predicted anticipated response. This suggests that, for self-disclosures of sexual desires, participants might not have believed that their perceived quality of their relationship was enough to determine how a sexual partner might respond. It could speak

potentially to a difference between self-disclosures of sexual information compared to other types of self-disclosures, such that disclosing sexual information might not be as reliant on relational factors, as suggested by Greene et al.'s original DD-MM model.

Although Greene (2006; Green et al., 2012) did not include message preparation in her original model, Choi and colleagues (2016) introduced planning and scheduling into the DD-MM, but they only examined those who had previously disclosed personal information. Choi et al. found that disclosure efficacy negatively predicted planning, which positively predicted scheduling; however, the current study found this relationship only for the *undisclosed* rather than those who have disclosed, which may be due to disclosing health information versus disclosing sexual desires. Stigmatized nonvisible illnesses tend to be more long-term, if not permanent, conditions that affect a person's sense of self, whereas a sexual desire might be a more temporal, less identity-driven feature. Thus, it may be that people are not as strategic about disclosing their sexual desires compared to their health diagnoses. Rather, they might disclose in the spur of the moment and in response to their partner's behavior rather than plan out and schedule a time to disclose. More research should look into the relationship of message preparation on disclosing, as the current project is the first known study to apply the DD-MM using it as a factor that could predict disclosure message forms.

The Disclosed Model

Compared to the undisclosed model, the disclosed model in the current study differs more notably from the disclosed model by Greene and colleagues (2012), and it does so in several ways. First, this study found that information assessment (i.e., anticipated stigma) negatively predicted anticipated response, yet Greene et al. found a positive relationship, and they reported that information assessment negatively predicted disclosure efficacy, which was not found in this

study's undisclosed model. Second, anticipated outcome positively predicted disclosure efficacy in this dissertation, but it was not significant in Greene et al.'s final model. Third, the disclosed model in the present study found relational quality to positively predict anticipated response, which was not found in Greene et al.'s disclosed model. Given that different path relationships emerged between the phases in the current study's disclosed model, it might suggest that, for those who decide to disclose, when it comes to self-disclosing sexual desires, different factors might be relied upon during the decision-making process compared to when deciding to self-disclose nonvisible illnesses. Although Greene et al.'s disclosed model did find significant relationships between the phases when applied to nonvisible illnesses, the current study's disclosed model found different components within each phase, which suggests that, while the overall phase distinction might hold up across the two types of self-disclosure, disclosers might be relying on different aspects of each phase when choosing to disclose their sexual desires.

Overall Assessment

The evaluations between the undisclosed and disclosed models of the current study with Greene et al.'s (2012) models highlight a key difference: The content of the disclosure might determine which aspects individuals rely on during the decision-making process. As the DD-MM was created to address health disclosures (Greene, 2006) and has been applied to health disclosures since its inception (Choi et al., 2016; Pahwa et al., 2017; Venetis et al., 2017), it might be that the decision-making involved in disclosing sexual information is different from health-based information. One explanation for this might be that some self-disclosures of sexual desires might directly involve the participation of the disclosure recipient, such that to fulfill some sexual desires that were reported in this study, a sexual partner is required. As the both the undisclosed and disclosed models in Greene et al. (2012) and the current study mirrored each

other only in only some ways, more research is needed that is conducted with those who have disclosed across various types of information, such as disclosures around politics, highly sensitive identities, or other potentially face-threatening information, to get a better understanding of the disclosure process that can be applied to all types of disclosure.

Assessing this Study's Undisclosed and Disclosed Models

Some similarities and differences emerged between the undisclosed and disclosed models in the current study. The observations made in this section are based on visually comparing the models; they are not direct statistical comparisons. As well, the current study's models involved two different groups of participants: those who disclosed and those who did not. Because of this, comparisons between should be approached with caution and are referenced as "apparent."

Apparent similarities and variations will be discussed below.

Apparent Similarities Among the DD-MM Phases

The apparent similarities between the undisclosed and disclosed models were the paths between information assessment and receiver assessment, which resulted in five shared paths.

Information Assessment

For information assessment, in both the undisclosed models and the disclosed models, anticipated stigma negatively predicted anticipated response, consistent with Greene et al.'s (2012) original theorized DD-MM model but inconsistently with other studies using similar methods (Choi et al., 2016; Kuchenbecker & Bevan, 2023; Park et al., 2023; Venetis et al., 2018). Lee and Greene (2022) recently discussed that research analyzing the information assessment component is limited, which applies to the current study, given that only stigma was measured out of DD-MM five proposed components of information assessment. Given that sexual desires are likely to be perceived by potential disclosers as sensitive and potentially face-

threatening, the decision-makers in the present study might be worried that revealing their sexual desire will lead to temporary negative consequences (Fisher, 1986; Major & O'Brien, 2005).

Receiver Assessment

Anticipated Response and Outcome. Consistent with previous models (Choi et al., 2016; Greene et al., 2012), anticipated response positively predicted anticipated outcome, while anticipated outcome also positively predicted disclosure efficacy for both the undisclosed and disclosed models. Participants' certainty of short-term positive responses was linked with their certainty of more positive long-term relational outcomes. If individuals perceived that their partner would respond negatively, such as not verbally supporting or affirming the discloser, then the discloser might also feel that there could also be more long-term, permanent outcomes, such as relational termination (Lee & Greene, 2023).

Sexual Communal Strength. In both the undisclosed and disclosed models, sexual communal strength positively predicted both anticipated response and comfort with sexual communication. Regarding anticipated response, perceiving a partner to be more willing to meet the perceiver's sexual needs predicted the perception of higher confidence that, if disclosing a sexual desire, the disclosure would be responded to supportively and positively. Perceiving a partner as having high sexual communal strength suggests that a discloser might interpret a supportive response as being indicative of acceptance and consent to their desired behavior, thus reflecting a willingness to engage in the sexual act. More research, however, would need to be conducted to further assess this relationship.

The current study also found that individuals who perceive their partner to be more willing to fulfill their own sexual needs are likely to also feel more comfortable discussing sexual topics, regardless of whether they decide to disclose or not. This follows prior research

that found sexual partners are more open to discussing sexual topics when they believe their own desires will be met with an open mind (Muisse & Impett, 2015). Both comfort with sexual communication and greater willingness to fulfill a partner's sexual needs have been correlated with higher relational and sexual satisfaction (Muisse & Impett, 2015; Rubinsky & Hosek, 2020). Although not included in prior applications of the DD-MM, the findings of this study make a case for the importance of sexual communal strength as part of the receiver assessment factor in this communicative context (Muisse et al., 2012).

Apparent Differences Among the DD-MM Phases

The apparent differences between the undisclosed and disclosed models were the paths between information assessment, receiver assessment, and discloser efficacy, which resulted in six different paths that were significant in one but not the other.

Disclosure Efficacy

Variation appeared between paths in the undisclosed and disclosed model in relation to disclosure efficacy and which factors were statistically significant in predicting disclosure efficacy, as well as what disclosure efficacy was statistically significant in predicting. For the undisclosed model, sexual communal strength reached statistical significance and positively predicted disclosure efficacy ($\beta = .21$), whereas the relationship and direction were quite different in the disclosed model ($\beta = -.04$) and failed to reach statistical significance. Instead, for the disclosed model, both relational quality ($\beta = .21$) and comfort with sexual communication ($\beta = .67$) reached significance and positively predicted disclosure efficacy. With a difference in relationship estimated direction for sexual communal strength predicting disclosure efficacy between the models, for participants who chose not to disclose, their belief in their ability to disclose sensitive sexual information could be somewhat reliant on their perceptions of their

partners' willingness to meet their sexual desires; for those who did disclose, their belief in their ability might be predicated on if they perceived themselves to be in a high-quality relationship and were comfortable discussing sexual topics. Although difficult to speculate on these variations among the groups, it might be that for those who did *not* disclose, believing they can successfully encode a self-disclosure act is based on their partner's openness to the idea they wish to discuss.

Despite both sexual communal strength and relational quality being *other*-focused, only sexual communal strength is directly focused on sexual interaction. And even though comfort with sexual communication predicted efficacy for the disclosed, comfort discussing sexual topics doesn't necessarily imply one partner disclosing sexual information about themselves, which might be a more face-threatening discussion (Harris et al., 2014; Theiss & Estlein, 2014) than discussing broader sexual topics. Ultimately, as prior research found that engaging in sexual communication to be correlated with relational closeness (Coffelt & Hess, 2014), and comfort with discussing sexual topics can impact openness to self-disclosing on all topics (Sneed, 2008), more research should be conducted to better understand their roles in discloser efficacy around disclosing sexual desires.

Message Preparation

In the undisclosed model, disclosure efficacy was statistically significant and negatively predicted message preparation ($\beta = -.35$), but this relationship showed a much smaller estimate in the disclosed model ($\beta = -.03$) and failed to reach statistical significance. If further analysis were to show that a difference between the two estimates in the disclosed and undisclosed samples were statistically significant from each other, it might be that individuals who did not feel confident in their ability to self-disclose need to be more pro-active in consciously planning a

way to self-disclose their sexual desire. Given that planning involves more control over the information (Greene & Faulkner, 2002), if participants did not feel like they were able to disclose effectively in the past, curating a strategy could be a helpful way to convince a potential discloser to communicate a sexual desire in the future (Newell & Stutman, 1993). In other words, if individuals are not confident in their own abilities to disclose, it might take more mental preparation to opt to self-disclose.

Apparent Differences on Disclosure Likelihood

For those who had not disclosed, the likelihood that they might in the future was based on four factors: anticipated outcome, sexual communal strength, comfort with sexual communication, and disclosure efficacy. In comparison to the disclosed model set, only anticipated response and message preparation was estimated to be statistically significant in predicting the use of specific disclosure forms (as will be discussed in more detail in the following sections).

Anticipated Outcome

Participants who reported being more certain about the positive relational outcomes after disclosing were more likely to report a likelihood to self-disclose to their partner in the future. This is consistent with the DD-MM as applied in previous research (e.g., Greene et al., 2012; Venetis et al., 2015; Venetis et al., 2017). If individuals anticipated more positive relational outcomes as a product of revealing their sexual desire, such as strengthening a relational bond or enhancing their sexual connection, then they reported greater inclination to self-disclose their sexual desire to their partner at some future point. Compared to the undisclosed model, where anticipated outcome had a statistically significant positive effect ($\beta = .81$) on likelihood to disclose in the future, the relationship between anticipated outcome and prior use of indirect-

verbal ($\beta = -.41$), direct-nonverbal ($\beta = -.15$), and indirect-nonverbal ($\beta = -.33$) messages showed a different story. Anticipated outcome did have a positive relationship with message preparation for the prior use of direct verbal messages ($\beta = .24$), but was estimated to be smaller, and failed to reach statistical significance in the model. Thus, in apparent comparison with those who did not disclose, those who did disclose might place more emphasis on their perceptions of a future positive relational outcome only if they felt prepared to enact the disclosure through direct-verbal means, and less likely to have used any of the other message forms. This possibility will be discussed further in the following section.

Sexual Communal Strength

Perceptions of a partner's sexual communal strength reached statistical significance and negatively predicted the likelihood to disclose in the future for the undisclosed ($\beta = -.51$), but it did not reach statistical significance and had a lesser estimate effect for the prior use of direct-verbal ($\beta = .03$), indirect-verbal ($\beta = -.11$), direct-nonverbal ($\beta = -.17$), or indirect-nonverbal ($\beta = -.09$) message forms for the disclosed. Instead, sexual communal strength reached statistical significance positively predicting anticipated response ($\beta = .28$) for the disclosed, which itself reached significance and showed similar effect sizes while positively predicting the prior use of direct-nonverbal messages ($\beta = .23$), and negatively predicting the prior use of direct-verbal messages ($\beta = -.31$), in the disclosed models. This suggests that perceptions of partners' sexual communal strength might help distinguish the undisclosed and the disclosed.

In the undisclosed model, sexual communal strength reached statistical significance and had a negative direct effect on likelihood to disclose ($\beta = -.51$), but also reached statistical significance and positively predicted disclosure efficacy ($\beta = .33$), which itself reached statistical significance and positively predicted likelihood to disclose ($\beta = .30$). If the undisclosed

perceived their partner to be less willing and open to sexually fulfilling their needs, they were only more likely to report a high likelihood to disclose in the future if they felt they had the ability to do so (i.e., disclosure efficacy). Although the current study did not directly compare group models statistically, this observation suggests that one difference between those who did not disclose and those who did is their perceptions of their partners' sexual communal strength. This finding is in contrast with prior findings on sexual communal strength and open communication (Day et al., 2015; Impett et al., 2019; Muise et al., 2012) which found that participants who perceive their partner to have more interest in satisfying their sexual needs were more likely to disclose in the future. This contrasting finding only emerged and reached statistical significance for the undisclosed and not the disclosed, however (as will be discussed in the Disclosure Efficacy subsection). This apparent variation could mean that non-disclosers are making their decisions based on perceptions of the sexual aspects of their relationships rather than the more specific short-term interaction-based consequences (i.e., anticipated response).

Inherent to sexual communal strength is the idea that a sexual partner is open to engaging in sexual behaviors that would satisfy their partner (Muise et al., 2012); therefore, deciding to disclose or not might be predicated on the perception that disclosing a sexual desire will be responded to with acceptance of or consent to engage in the behavior with the discloser. An interesting contrast between the undisclosed and disclosed on sexual communal strength appears to be with the factor's relationship with both comfort with sexual communication and anticipated response. While sexual communal strength reached significance and positively predicted comfort with sexual communication for both the undisclosed ($\beta = .72$) and the disclosed ($\beta = .67$), comfort with sexual communication only reached statistical significance for the undisclosed on the likelihood to disclose in the future ($\beta = .30$) but did not reach statistical significance and

showed a negative and near zero relationship for the prior use of direct-verbal ($\beta = -.01$), indirect-verbal ($\beta = -.14$), direct-nonverbal ($\beta = -.05$), or indirect-nonverbal ($\beta = -.15$) message forms when disclosing for the disclosed. In addition, sexual communal strength also reached statistical significance and positively predicted anticipated response for both the undisclosed ($\beta = .52$) and the disclosed ($\beta = .27$), yet anticipated response was different in sign but not statistically significant for predicting likelihood to disclose for the undisclosed ($\beta = -.28$), but did reach statistical significance for positively predicting more use of direct-nonverbal ($\beta = .23$) and negatively predicting use of direct-verbal messages ($\beta = -.31$) for those who disclosed. It might be that, for the undisclosed, their perception of their sexual partner as being receptive to their sexual desire plays an important role in deciding to disclose.

As previously discussed, anticipated outcome also predicted the likelihood to disclose for the undisclosed. Given that the majority (73%) of participants reported a sexual desire that was interpersonal (i.e., something between them and their partner), and that anticipated outcome predicted the likelihood to disclose in the future, potential self-disclosers might decide to disclose if they perceive their efforts will be met with a positive outcome, such as their partner agreeing to participate in their desired behavior. These two factors (sexual communal strength and anticipated outcome) coupled together suggest that choosing to disclose is assessed in terms of sexual outcomes. The goals and motivations of participants, however, were not measured in the current study, so future research should work to better understand the various purposes for why individuals might self-disclose their sexual desires as well as to further investigate the relationships of sexual communal strength and likelihood to self-disclose sexual desires in the future.

Comfort with Sexual Communication

As mentioned in the prior section, comfort with sexual communication reached statistical significance and positively predicted the likelihood to disclose to a partner in the future for the undisclosed but showed a negative relationship and failed to reach statistical significance for the disclosed for all the four message forms. In line with the previous findings by Harris et al. (2014) on communicating sexual desires and message directness, even if individuals are comfortable communicating with their partners about sexual topics, they might still choose to avoid discussing novel sexual behavior. Previous studies (e.g., Colson et al., 2006) have found that most people perceive broad sexual topics as easy to discuss with their partners, yet when talking about *specific* sexual practices, they are more uneasy. For the current study, given the undisclosed reported avoiding disclosing in a past interaction with their current partner, and then were assessed on the likelihood to disclose in the future with their current partner, it might be that these individuals perceive themselves as comfortable discussing sex generally, yet discussing their own sexual desires might cause some sort of discomfort. These individuals might feel fine discussing broader attitudes around sexual behavior but might perceive revealing their own desire to participate as a step too far, and thus decide to avoid revealing such personal information. In other words, individuals might be okay discussing sexual behaviors broadly, but not when it comes to identifying or taking ownership with discussed behaviors. Future research should qualitatively examine why individuals choose to not disclose to better understand comfort around communicating about sexual desires.

Disclosure Efficacy

Consistent with prior findings (Checton & Greene, 2012; Steuber & Solomon, 2011), the greater the belief that the non-disclosed had the ability to disclose ($\beta = .30$), the more likely they

were to report that they might disclose in the future. A similar relationship was found between disclosure efficacy and both the prior use of direct-verbal ($\beta = .35$), indirect-verbal ($\beta = .28$), and indirect-nonverbal ($\beta = .14$) message forms for the disclosed; however, these three did not reach statistical significance. A different relationship was found between disclosure efficacy and the prior use of both direct-nonverbal ($\beta = -.01$), which also did not reach statistical significance in their respective models. As sexual topics can be both challenging (Anderson et al., 2011; Theiss, 2011), and disclosing sexual desires can be face-threatening (Theiss & Estlein, 2014), having confidence that they have the interpersonal skill to disclose potentially highly sensitive information to a partner might be central in influencing people's decision-making process. As mentioned, in the disclosed models, but not the undisclosed models, comfort with sexual communication positively predicted disclosure efficacy. Even if individuals are comfortable with discussing sexual topics, if they do not view themselves as capable of communicating effectively, they might lean towards avoiding the disclosure altogether (Afifi & Guerrero, 1998; Guerrero & Afifi, 1995).

Assessments of Disclosure Message Form Use

The current study deviated from previous applications of the DD-MM by looking at both the message channel (i.e., verbal and nonverbal) and message directness (i.e., direct and indirect) compared to just directness (Venetis et al., 2017) or the depth of disclosure (Greene et al., 2012). It assessed four self-disclosure message forms: direct-verbal, indirect-verbal, direct-nonverbal, and indirect-nonverbal. Looking into the ways in which participants either reported enacting their disclosures or how they might choose to do so in the future, there was variation between what undisclosed participants reported they *would* do in the future, and what the disclosed

participants reported they *did* do in the past. Findings and evaluations of these two groups are discussed next.

Verbal versus Nonverbal Disclosure

As noted in the results section, by far the most commonly used form by the participants, as well as the most likely to use in the future, were direct- (91.3%) and indirect- (46.4%) verbal messages, however, the current findings suggest that those who did not disclose perceive themselves to use verbal message forms, whereas those who did disclose report having used more nonverbal forms. The undisclosed and disclosed varied in relation to three factors: anticipated response, anticipated out, and message preparation. The following section discusses factors that predicted the future use of or past use of direct or indirect message forms.

Anticipated Response

Direct. For the undisclosed, anticipated response positively predicted the likelihood to use direct-verbal message forms in the future, whereas for the disclosed, anticipated response negatively predicted the previous use of direct-verbal messages. Through all nine models in the current study, this was the only significant predictor that was found to be in direct contrast between the two sets of models. In addition, anticipated response positively predicted the use of direct nonverbal behavior for the disclosed. This set of findings suggests that undisclosed participants reported they would be more likely to use direct-verbal messages if they had more certainty in a positive response from their partners. On the other hand, the more certainty the disclosed had about how their partner would respond, the *less* likely they were to have used direct-verbal messages and the more likely they were to have used direct-nonverbal behavior.

As the exploratory data showed, 91.3% of those who disclosed in the past reported using direct-verbal means. Given that it was only anticipated response that predicted less reported use

of direct-verbal messages, for the other 8.7% of disclosers, less certainty on how their sexual partner would react was associated with the use on other message forms, suggesting an important factor in their decision-making about how to communicate their sexual desire. Future research should work to test this relationship more fully. As anticipated response was a positive predictor of the use of direct-nonverbal message forms for the disclosed, if these participants were uncertain of the response, they might choose to engage in direct nonverbal behavior, such as using gestures or touch, rather than verbal messages, to disclose a sexual desire. Given that nonverbal messages tend to be more polysemous (Manusov, 2016; Manusov & Harvey, 2011), such that nonverbal behavior might be interpreted in multiple ways within the same interaction or context, individuals who disclosed in the past but who were uncertain of their partner's response seem to have chosen a method of doing so that was less face-threatening (Theiss & Estlein, 2014) while still potentially offering them an opportunity to fulfill their sexual desire.

With sexual communal strength predicting anticipated response for both the undisclosed and disclosed sets of models, and anticipated response positively predicting the future use of direct-verbal messages for the undisclosed and negatively predicting the past use of direct-verbal messages for the disclosed, it might be that, for individuals who did disclose, if they perceived their partner as being open and willing to satisfy their sexual needs, they felt more comfortable using direct nonverbal behaviors rather than direct verbal behaviors. If those who disclosed perceived direct-verbal messages as too face-threatening, given that they held less certain expectations of positive reactions from their sexual partner, they might then choose to engage in less-face threatening (i.e., more deniable) message forms (Harris et al., 2014; Wilson et al., 1998). Despite the current study not asking participants the outcome of their disclosure directly, the exploratory analyses showed that only 60.7% reported that their partner supported them. It

might be that using nonverbal behavior allowed individuals an opportunity to test the waters, so to speak, and if the nonverbal disclosure goes awry, they could then be able to argue for misinterpretation of their behavior. More research should be done to test the choice of verbal versus nonverbal behavior in relation to uncertainty.

Indirect. Anticipated outcome was found to positively predict the future use of indirect-verbal messages for the undisclosed, whereas there were no factors that predicted the use of indirect-verbal messages for those who had disclosed prior. Direct communication might involve greater risk (Murray et al., 2006), which might result in negative outcomes, such as relational dissolution (Pennington, 2020). If individuals perceive higher uncertainty about the long-term relational outcomes of any disclosure of sexual desires, then they might choose to pursue less face-threatening means (Harris et al., 2014), which might provide them an opportunity to deny ownership or avoid identifying with the sexual desire (such as with a direct statement).

Coupled with the finding that anticipated response positively predicted the future use of direct verbal forms for the undisclosed, individuals might weigh the short-term response with the long-term relational outcomes. After this short-term versus long-term evaluation, potential disclosers might contemplate using a direct-verbal message if they believe their disclosure will immediately be responded to in a positive manner. But, if they perceive a negative immediate response, they might opt for a less direct route, such as an indirect-verbal message, especially if they still perceive positive long-term relational outcomes through this method.

Given that anticipated response *negatively* and anticipated outcome *positively* predicting the future use of indirect-verbal messages, self-disclosing is, as theorized, an example of the functional ambivalence of interpersonal communication (Spitzberg & Cupach, 2007). Whereas verbally disclosing can be pro-social, such that it might result in more certainty of positive long-

term relational outcomes, at the same time it might be anti-social in that individuals feel less certainty about the short-term response. In other words, if individuals self-disclose a sexual desire to a partner, they might immediately be met with resistance, but over time it might serve as beneficial for their relationship.

Message Preparation

Participants reported much less use of, and potential future use of, nonverbal message forms compared to verbal forms. As reported, only 24.2% of those who disclosed reported using direct-nonverbal messages, while 21.9% reported using indirect-nonverbal forms. For the undisclosed, there were no significant factors predicting future use of nonverbal strategies. This might suggest that, when it comes to anticipating future self-disclosure, individuals might view the very act of disclosing as a verbal process. Thus, if individuals were to mentally plan out a time and way to disclose, it might be through verbal means. It should be noted that for likelihood to use indirect-verbal messages for the undisclosed, message preparation was estimated as a positive predictor; however, this is can only be speculated as the factor did not reach significance ($p = .06$). Disclosure efficacy was found to be a negative predictor for message preparation for each of the undisclosed models, so there might be some significance between a belief an individual has in their ability to disclose, their mental preparation to disclose, and the outcome of their decision-making process. Future studies might investigate this relationship and finding, or lack thereof, to add to the current study and Choi et al.'s (2016) inclusion of message preparation as a fourth and important phase of the DD-MM, as well as to better understand message preparation for those who ultimately chose to not disclose.

On the other hand, message preparation was found to positively predict both the use of direct- and indirect-nonverbal behavior for those who had disclosed. For them, the more time

that they reported spending to prepare a message, through both planning what to say and scheduling a time to disclose, then the more likely they were to use either a direct- or indirect-nonverbal behavior. As a majority of those who disclosed reported using a direct-verbal means (91.3%), with less than a quarter of disclosed participants using a nonverbal message, it might be that participants' planning involved some use of nonverbal cues, rather than only disclosing their desire verbally. Because it is likely that individuals use multiple message channels when disclosing (i.e., verbal *and* nonverbal cues) (Greene, 2006; Harris et al., 2014), those who disclosed might have planned to incorporate more than just verbally disclosing their desire. If an individual were to communicate their desire nonverbally, it follows they might want to spend time prior to the interaction to decide what to do. In relation to indirect-nonverbal messages, some messages might involve more mental planning, such as wearing an explicit outfit or altering the environment to communicate a specific sexual desire.

Application of Findings

This study's results offer contributions to both the literature around the DD-MM (Greene et al., 2012) and more broadly to interpersonal sexual communication (Manning, 2021). It also provides useful ideas for therapists and others who work with individuals or couples in the areas of sexuality, sexual identity, or sexual relationships. Each of these applications are discussed.

Theoretical

The intended purpose of the DD-MM was to address health diagnosis self-disclosures (Greene, 2009; Lee & Greene, 2023), with much of the application of the model focused on nonvisible illness self-disclosures (Choi et al., 2016; Kuchenbecker & Bevan, 2023; Pahwa et al., 2017; Tomas et al., 2022); Venetis et al., 2015, 2018). In recent years, studies have utilized the model for broader health-related concepts, such as disclosing birth control status (Park et al.,

2023), revealing transgender identity to medical providers (Friley & Venetis, 2022), suicidality (Love et al., 2021), and sexually transmitted infections (Scheinfeld, 2023). The current study appears to be the first to apply to the DD-MM to a context not related directly to some aspect of health or a health context. Although comparisons of the undisclosed and disclosed models from the current study with Greene et al.'s (2012) undisclosed and disclosed models is not possible due to each using slightly different measures and being tested on different samples, there might be some speculation on how the DD-MM holds up across types of self-disclosures.

Ultimately, for this study, the DD-MM did not appear to be a strong model when applied to self-disclosing sexual desires. Overall, this study added two factors to the model (i.e., sexual communal strength and comfort with sexual communication), measured information assessment with a different variable (i.e., anticipated stigma), and included message preparation as a fourth phase based on the work of Choi et al. (2016). Of the original factors used from Greene et al.'s (2012) DD-MM model, only one path was replicated in the undisclosed model (i.e., anticipated response predicting anticipated outcome), whereas no paths were replicated in the disclosed model. It should be noted that in Greene et al.'s disclosed model, anticipated response and outcome was combined into anticipated reaction, so it is likely that this factor would capture this same path in the current study's disclosed model.

While Greene et al.'s model showed path consistency between certain factors within the DD-MM phases in both undisclosed and disclosed models, the current set of models for this study showed only some path consistency between the phases within each set of models, albeit with differing factors. Of the original DD-MM factors, the current set of models consisted of three similar paths between information assessment and receiver assessment. Of the added factors, two paths were similar across the two sets of models. On the other hand, there were six

paths (three in each of the undisclosed and disclosed models) that were not replicated in the other. This provides some credence that the DD-MM holds up for those who do disclose compared to those who decide not to.

The current study is one isolated study, therefore, much more research should be conducted utilizing the DD-MM for self-disclosures around not just sexual desires, but other sexual topics. It might be that the decision-making process varies between health contexts and sexual contexts. Compared to invisible health diagnoses, sexual desires might prove less pertinent to individuals' overall identity or relationships, thus resulting in different factors having a stronger impact within the decision-making process. Given the DD-MM has begun to be utilized for non-visible illnesses, the DD-MM likely is a useful tool for decision-making within health contexts, with a strong foundation and consistent findings across health applications thus far (Lee & Greene, 2023). Yet more testing of this model should be done to examine its application towards self-disclosing more broadly.

Interpersonal Sexual Communication

As noted by Manning (2021), sexual behavior is a communicative act, where sexuality encompasses not just who an individual might be attracted to, but also what types of behaviors an individual might find arousing. The current study's findings provide some insight into how individuals or couples might be able to improve their relational or sexual satisfaction. Previous research (Day et al., 2015; Impett et al., 2019; Muise et al., 2012; Muise & Impett, 2015), has found that, overall, communicating about sexual topics within a sexual relationship can lead to more relational and sexual satisfaction.

But the current findings suggest that both the decision to disclose and the way in which disclosure occurs is likely impacted by assessments of how the potential receiver will react, both

through anticipated response and outcomes. Given the contradiction between those who did disclose and those who did not on these two factors, it might be that individuals only disclose if they perceive that they will be met with immediate positive support. But if they don't believe this, then utilizing a nonverbal strategy might be more likely. If they do decide to enact a nonverbal strategy, it is likely that they spent time prior to the interaction to mentally prepare their nonverbal behavior, whether they decide to engage in direct- or indirect-nonverbal disclosure behavior.

Therapeutic

As noted, 39.9% of participants chose not to disclose, and of the 60.1% of those who did disclose, only 60.7% of those reported that their partner supported them. This suggests that, for a majority of participants, the outcome of self-disclosing to their sexual partner is not always positive. Even if they mentally plan it out, it is not always a guaranteed success. For those who work with sexual partners, such as therapists or counselors, focusing on the message form when disclosing might allow individuals a safety net when assessing their sexual partner's reaction to a given sexual desire. That is, there might be a way to first test the waters for how a sexual partner feels about a given sexual desire without having to potentially identify with or reveal an individual's desire to engage in a specific sexual act.

Despite most of the participants who disclosed reporting that they did so through direct-verbal means, therapists might suggest that individuals first pursue less direct paths, such as an indirect-verbal message, which offers a less face-threatening (Theiss & Estlein, 2014) approach. In addition, choosing to enact nonverbal messages allows individuals the opportunity to negate the intent if their partner negatively interprets the behavior. It should be cautioned that some

nonverbal behavior, despite being indirect (such as wearing a BDSM harness), might still result in the potential for a negative short-term response.

As anticipated response and message preparation was a positive predictor for the use of nonverbal messages for those who did disclose, therapists might suggest that their clients begin assessing their partners' response through indirect-verbal means and then proceed to use either direct- or indirect-nonverbal messages if the initial communication was well-received. Whereas direct communication between sexual partners allows for minimal misinterpretation, directness sometimes involves risk (Vogel & Wester, 2003). As such, choosing another communicative route might be a more practical and realistic approach for individuals who might be struggling to communicate their sexual desire to a partner.

Limitations and Future Research

Although there are many important results in these data, this dissertation is not without its limitations. Whereas the DD-MM is intended to predict the likelihood to disclose through an ordered linear structure (i.e., information assessment leads to recipient assessment, which leads to discloser efficacy, etc.), the cross-sectional survey design was not be able to test causal relationships. In addition, those who had disclosed had to think back prior to their decision to disclose. This recollection of specific details might be harder for participants to assess and could misrepresent what actually went into their decision-making (Metts et al., 1991) as well as how much decision-making occurred. The study also relied on self-reports of sexual information, and social desirability might have impacted participants' responses (King et al., 2019) as well as influenced their perspective on what types of disclosing behaviors they might have enacted or would enact in the future.

For the message forms, participants who had disclosed were able to indicate multiple examples that best resembled their actual disclosing behavior. This method did not allow an assessment of whether people tried one form first and then one or more subsequently, or if two (or more) behaviors or actions were done simultaneously, such as verbally asking a question while nonverbally gesturing towards a body part. Nonverbal behavior can serve both as a primary and independent way to communicate, but also as a complementary role with verbal communication. Thus, the current study did not collect data on the participants on how many strategies they used, in what order if they used multiple, or how many forms did they use at once time. As a consequence of this, the current study was unable to truly understand the role of nonverbal behavior as a potentially primary way of self-disclosing a sexual desire.

Additionally, the current study's design was such that participants were divided into two groups (i.e., undisclosed and disclosed), and then statistical analyses were conducted on each group for their respective models. As a product of this, direct comparisons between the undisclosed and disclosed were not able to be drawn, but rather inferred upon. Future studies might follow the design used by Greene et al. (2012) which asked participants to report on both an individual with whom they disclosed and an individual with whom they did not. Although, given the nature of sexual desires in relation to a specific sexual partner, this might not be as applicable.

As for the decision-making process, this study was not assessing compliance-gaining (Harris et al., 2014), but people might have disclosure goals when self-disclosing sexual desires. When individuals seek compliance from another, they are likely to communicate in what they believe will be the most effective way to achieve their desired goal (Wilson, 2002). Given that some sexual desires are often interpersonal (e.g., involving the relational partner or extradyadic

participation) rather than intrapersonal (i.e., a sexual desire involving only the individual), potential self-disclosers can be reliant on interdependence with their partner to fulfill their sexual desire, and thus disclosure may be a part of compliance-seeking more broadly.

Finally, given the statistical analysis utilized in this study, issues related to power were a limitation. Despite the current study's sample mirroring the size of other studies using SEM to analyze the DD-MM, the added factors resulted in the current study's models to be more complex than previous iterations of the DD-MM. The original number of parameters needed to be reduced, and although this reduction was conducted and informed by advanced statistical processes, having a larger sample size would have allowed the intended measurement model to stay intact.

This study extended application of the DD-MM (Greene, 2009) while also providing greater understanding of the decision-making process behind disclosing sexual desires; however, future research should explore the components addressed in the study further. Specifically, further examining the role of sexual communal strength in relation to self-disclosure of sexual desires and other sexual topics would aid in a richer understanding of how sexual information might deviate from the field's understanding of disclosing other sensitive information.

Future research might also better unpack how motivations and goals influence the decision-making process. To self-disclose a sexual desire might serve the purpose of compliance-gaining (Harris et al., 2014); however, it might also serve the functions of identity exploration, identity expression, or relational growth. This study added to the literature on *how* individuals self-disclose, but looking more into the *why* would create an overall better understanding of the decision-making process around communicating sexual desire. With such a high percentage of the sample identifying as heterosexual (84.4%) or bisexual (10.4%), more

research into how this process might be consistent or differ for gay men and lesbian women would add to our knowledge of the role of traditional sexual roles in sexual self-disclosures, given that women tend to experience more restrictive scripts within cultural gender standards (Simon & Gagnon, 2003).

Conclusion

The findings from this dissertation add to the self-disclosure and sexual communication literatures by highlighting how disclosing sexual desires speaks to the functional ambivalence of interpersonal communication (Spitzberg & Cupach, 2007). Specifically, how individuals weigh potential risks with the potential rewards when deciding to self-disclose potentially face-threatening information can teach us more about the often-difficult decisions sexual partners navigate that might be vital to their own sexual identities and both relational and sexual satisfaction.

Sexual communal strength appeared to be one factor in explaining the variation between those who had disclosed from those who had not. It appeared that individuals' perceptions of their partners' willingness to fulfill their sexual needs performed a significant role in deciding to disclose sexual desires. For those who chose not to disclose, their decisions might be based on more sexual outcomes related to the sexual aspects of their relationships, such as their perception of their partners' willingness to engage in the sexual desire, as well as any relational outcome of their decision to disclose. For those who did not disclose prior, comfort with sexual communication and disclosure efficacy also positively predicted likelihood to disclose in the future.

In addition, of all the indicators across both the undisclosed and disclosed, anticipated response was the only factor that resulted in contrasting findings, specifically relating to

predicting the prior use of and future use of direct-verbal messages, albeit in opposite directions. For those who did not disclose, they perceived themselves as more likely to disclose through direct-verbal means in the future if they perceived higher certainty in their partner's immediate response, whereas those who did disclose prior reported being less likely to use direct-verbal messages if they perceived higher certainty in their partner's immediate response, instead opting for more direct-nonverbal messages.

The results also show that, when self-disclosing sexual desires to a partner, individuals are much more likely to use verbal than nonverbal message forms, and if doing so, prefer to use direct forms over indirect forms. This complements previous work conducted on message forms of sexual communication (Harris, 2014; Theiss & Estlein, 2014). Just over half of individuals who disclosed their sexual desire reported that it was met with support from their partner. As such, for many others, engaging in less direct and face-threatening message forms might be a better means to "test out" how a sexual partner might respond, especially when individuals perceive that their sexual desire poses an immediate or long-term threat to their relationship. Finally, the current study provides evidence and strengthens the argument proposed by Greene (2009) and Choi et al. (2014) that individuals weigh the factors of assessing the information, their potential receiver, and the time spent preparing their message prior to disclosing sexual desires.

Appendix A
Recruitment Script (MTurk)

My name is Benjamin Compton, and I am a doctoral student in the Department of Communication at University of Washington. I am conducting a research study examining decision-making and self-disclosure of sexual desires, that is, behaviors or things that you want to try sexually, and you are invited to participate in the study. Self-disclosure of sexual desires involves verbally or nonverbally telling a partner one's sexual preferences or likes and dislikes.

All participants must (a) be over the age of 18, (b) currently be in an ongoing romantic and/or sexual relationship (at any stage of a relationship, from just getting to know one another to married), and (c) have specific sexual desires.

Specifically, the study will ask questions about your experience communicating about those sexual desires (e.g., "Have you disclosed to your current partner about your desires?"), your sexual history (e.g., "Are currently sexually active?"), your views on your on sexual desires (e.g., "My partner would act as if I am inferior if they knew my sexual desires?"), the relationship between you and a current (e.g., "Is the relationship satisfying?"), and your own ability to communicate about your sexual desires (e.g., "How confident were/are you that you can share your sexual desires with your current partner when you want to?"). It does not matter if you have disclosed your desires to your current partner or not in order to be in this study.

If you agree, you are invited to participate in an online survey that is anticipated to take no more than 15-18 minutes. Participation in this study is voluntary. Your identity as a participant will remain anonymous both during and after the study. If you participate, you will receive \$3.00 compensation for your participation through the Amazon Mechanical Turk program.

If you are eligible and would like to participate, please click on the following link:

https://uwardsandsciences.sjc1.qualtrics.com/jfe/form/SV_bw77pe0u1TOuNVA

If you have questions, please contact me at compton9@uw.edu.

Thank you for your participation.

Benjamin L. Compton
University of Washington
Department of Communication
Doctoral Student

Recruitment Script (University of Washington)

My name is Benjamin Compton, and I am a doctoral student in the Department of Communication at University of Washington. I am conducting a research study examining decision-making and self-disclosure of sexual desires, that is, behaviors or things that you want to try sexually, and you are invited to participate in the study. Self-disclosure of sexual desires involves verbally or nonverbally telling a partner one's sexual preferences or likes and dislikes.

All participants must (a) be over the age of 18, (b) currently be in an ongoing romantic and/or sexual relationship (at any stage of a relationship, from just getting to know one another to married), and (c) have specific sexual desires.

Specifically, the study will ask questions about your experience communicating about those sexual desires (e.g., "Have you disclosed to your current partner about your desires?"), your sexual history (e.g., "Are currently sexually active?"), your views on your on sexual desires (e.g., "My partner would act as if I am inferior if they knew my sexual desires?"), the relationship between you and a current (e.g., "Is the relationship satisfying?"), and your own ability to communicate about your sexual desires (e.g., "How confident were/are you that you can share your sexual desires with your current partner when you want to?"). It does not matter if you have disclosed your desires to your current partner or not in order to be in this study.

If you agree, you are invited to participate in an online survey that is **anticipated to take no more than 12-15 minutes**. Participation in this study is voluntary. Your identity as a participant will remain anonymous both during and after the study. **If you participate, you will be entered into a lottery to receive one of four \$50 gift cards**. At the conclusion of the study, you will be given a link to copy-paste that will allow you to enter optional information (name and email) to be put into the lottery for one of the four gift cards. **This information will not be able to be linked to your previous responses to the original survey.**

If you are eligible and would like to participate, please click on the following link:

https://uwardsandsciences.sjc1.qualtrics.com/jfe/form/SV_bw77pe0u1TOuNVA

If you have questions, please contact me at compton9@uw.edu.

Thank you for your participation.

Benjamin L. Compton
University of Washington
Department of Communication
Doctoral Student

Appendix B

Research Participant Online Consent Form

Click the “Continue” button on the bottom right-hand side of this page to start the survey. For the research study: “Sexual Disclosure of Sexual Behavior: Decision-making around Sexual Desires”

I. Purpose of the research study

Benjamin Compton is a PhD student in the Department of Communication at the University of San Washington. If you are at least 18 years-old, you are invited to participate in a research study he is conducting under the direction of Dr. Valerie Manusov, a professor in the same department. The purpose of this research study is to examine how people decide whether or not to disclose to their partners about their sexual preferences/desires.

II. What you will be asked to do

If you decide to be in this study, you will be asked to answer questions regarding communication with your current partner (if you have more than one, you will be asked to choose just one to report on) as well as about your attitudes and thoughts about your sexual desire(s). Your participation in this study will take a total of 15-25 minutes.

III. Foreseeable risks or discomforts

Sometimes when people are asked to think about their thoughts and emotions, they feel sad or anxious. Additionally, reporting your sexual attitudes and sexual behaviors could cause you to feel anxious or uncomfortable. If you would like to talk to someone about your feelings at any time, you can call toll-free, 24 hours a day: Crisis Connections at 1-866-427-4747.

IV. Benefits

A direct benefit will be monetary compensation upon completion associated with this study. An indirect benefit of participating will be knowing that your help researchers better understand communication between partners.

V. Confidentiality

Any information provided will remain anonymous and kept in a password-protected computer file in the researcher’s office for a minimum of five years. All data collected from you will be coded with a unique identifier (a combination of your birthday and four digits of your choosing) that will only be recognizable to you. Your name will never be used or requested. The results of this research project may be made public and information quoted in professional journals and meetings, but information from this study will only be reported as a whole and not individually.

VI. Compensation

Participation in this study will result in \$5.00 compensation upon completion through the Amazon Mechanical Turk (MTurk) program.

VII. Voluntary Nature of this Research

Participation in this study is entirely voluntary. You do not have to do this, and you can choose not to answer any question or you can quit filling out the survey at any point. Deciding not to participate or not answering any of the questions will have no effect on any benefits to which you're entitled, like your health care, employment, or grades. You can withdraw from this study at any time without penalty.

VIII. Contact Information

If you have any questions about this research, you may contact either:

- 1) Benjamin Compton; email: compton9@uw.edu; phone: (480) 277-2607
- 2) Dr. Valerie Manusov; email: manusov@uw.edu

By clicking "Continue" on the button on the bottom right side of the page (>>), you are indicating that you are at least 18 years-old, have read and understand this form, and consent to being involved in the research it described to you. If you wish to do so, you can print a copy of this consent form for your records.

Appendix C

Risk and Privacy Statement

I. Risk

While we do not anticipate any risks from participating in this study, some of the questions in the survey are sensitive in nature. If you become uncomfortable or upset when taking the survey, you can choose to skip any question that you do not want to answer or stop participation at any time. In addition, you may feel some minor psychological discomfort associated with sharing information about your relationship and sexual aspects of your relationship. You can stop your participation at any time without penalty.

II. Privacy

At the conclusion of this study, the researchers may publish their findings. Information will be presented in a summary format, and you will not be identified in any publications or presentations. Any data collected during this research study will be kept anonymous by the researchers. We will do our best to protect the anonymity of the information we gather from you, but we cannot guarantee 100% anonymity. Your anonymity will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties. The site hosting the survey is the Amazon Mechanical Turk site. MTurk complies with applicable data privacy laws in its role as a data controller of its own data and as a data processor of customer data. The entire privacy policy can be found on this web address: <https://www.mturk.com/participation-agreement>

Please be assured that only the researchers will have access to the raw data you provide. However, your data may be used in other related projects for an extended period of time (of up to 10 years). Any individual data collected during this research study will not be disclosed by the researchers.

- 1) Benjamin Compton; email: compton9@uw.edu; phone: (480) 277-2607
- 2) Dr. Valerie Manusov; email: manusov@uw.edu

By clicking “Continue” on the button on the bottom right side of the page (>>), you are indicating that you are at least 18 years-old, have read and understand this form, and consent to being involved in the research it described to you. If you wish to do so, you can print a copy of this consent form for your records.

Appendix D

SEM Data Results Output

Model One: Undisclosed Likelihood of Disclosure Hypothesized Model

lavaan 0.6.15 ended normally after 108 iterations

Estimator	ML	
Optimization method	NLMINB	
Number of model parameters	140	

	Used	Total	
Number of observations	126	326	

Model Test User Model:

Test statistic	3689.735
Degrees of freedom	1690
P-value (Chi-square)	0.000

Parameter Estimates:

Standard errors	Standard
Information	Expected
Information saturated (h1) model	Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
ASL =~						
ASUnd1	1.000				1.114	0.637
ASUnd2	0.982	0.147	6.665	0.000	1.094	0.661
ASUnd3	0.993	0.138	7.192	0.000	1.106	0.726
ASUnd4	1.209	0.157	7.698	0.000	1.347	0.791
ASUnd5	1.353	0.174	7.778	0.000	1.507	0.802
ASUnd6	1.042	0.147	7.103	0.000	1.161	0.714
ASUnd7	1.106	0.149	7.420	0.000	1.231	0.755
ASUnd8	0.909	0.127	7.138	0.000	1.012	0.719
ASUnd9	1.418	0.165	8.586	0.000	1.580	0.916
ASUnd10	1.320	0.155	8.514	0.000	1.471	0.905
ASUnd11	1.362	0.158	8.640	0.000	1.517	0.924
ASUnd12	1.348	0.161	8.376	0.000	1.501	0.885
ASUnd13	1.417	0.164	8.640	0.000	1.578	0.924
ARUndL =~						
ARUnd1	1.000				0.439	0.248
ARUnd2	1.298	0.609	2.131	0.033	0.570	0.287
ARUnd3	0.911	0.403	2.262	0.024	0.400	0.330
ARUnd4	3.478	1.257	2.767	0.006	1.526	0.833
ARUnd5	3.385	1.226	2.760	0.006	1.485	0.813
ARUnd6	1.358	0.633	2.147	0.032	0.596	0.291
ARUnd7	3.283	1.184	2.773	0.006	1.441	0.854
ARUnd8	1.556	0.632	2.462	0.014	0.683	0.424
ARUnd9	2.512	0.934	2.690	0.007	1.102	0.653
ARUnd10	3.074	1.114	2.760	0.006	1.349	0.811
ARUnd11	3.299	1.197	2.756	0.006	1.448	0.801
ARUnd12	1.969	0.751	2.621	0.009	0.864	0.557
AOUndL =~						
AOUnd1	1.000				1.121	0.599
AOUnd2	1.015	0.148	6.864	0.000	1.138	0.753
AOUnd3	1.540	0.199	7.758	0.000	1.727	0.910
AOUnd4	1.752	0.221	7.916	0.000	1.964	0.944
AOUnd5	1.325	0.186	7.143	0.000	1.486	0.799
RQL =~						
RQ1	1.000				0.814	0.835
RQ2	0.893	0.088	10.158	0.000	0.727	0.766
RQ3	1.337	0.158	8.482	0.000	1.088	0.674
RQ4	0.994	0.103	9.681	0.000	0.809	0.741
RQ5	1.612	0.115	13.971	0.000	1.312	0.935
RQ6	1.686	0.144	11.700	0.000	1.373	0.840
RQ7	1.420	0.178	7.979	0.000	1.156	0.643
RQ8	1.381	0.193	7.161	0.000	1.124	0.590
SCSL =~						
SCS1	1.000				1.420	0.899
SCS2	0.631	0.105	6.018	0.000	0.897	0.501
SCS3	0.952	0.066	14.496	0.000	1.352	0.882
SCS4	0.721	0.096	7.498	0.000	1.023	0.594
SCS5	0.728	0.088	8.245	0.000	1.034	0.637
SCS6	0.770	0.062	12.399	0.000	1.093	0.817
EffUndL =~						
EffUnd1	1.000				1.601	0.928
EffUnd2	0.894	0.080	11.164	0.000	1.431	0.749

EffUnd3	0.970	0.050	19.302	0.000	1.553	0.949
EffUnd4	0.769	0.087	8.806	0.000	1.230	0.650
SexTalkL =~						
SexTlk1	1.000			1.499	0.890	
SexTlk2	1.038	0.070	14.860	0.000	1.556	0.881
SexTlk3	0.819	0.084	9.750	0.000	1.227	0.703
SexTlk4	1.051	0.063	16.671	0.000	1.576	0.923
SexTlk5	0.978	0.083	11.728	0.000	1.466	0.784
SexTlk6	1.142	0.071	16.094	0.000	1.712	0.910
SexTlk7	1.152	0.060	19.070	0.000	1.727	0.968
EnactmentAss =~						
PlnUnd1	1.000			1.658	0.923	
PlnUnd2	1.050	0.082	12.810	0.000	1.741	0.960
SchUnd1	0.565	0.091	6.232	0.000	0.937	0.510
UndLike =~						
UndsRvl	1.000			1.557	0.888	
UndsShr (UL=~)	1.000			1.557	0.852	

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
UndLike ~						
ARUndL	-0.921	1.133	-0.813	0.416	-0.260	-0.260
AOUndL	0.999	0.442	2.260	0.024	0.719	0.719
SCSL	-0.478	0.177	-2.707	0.007	-0.436	-0.436
SexTalkL	0.258	0.130	1.983	0.047	0.248	0.248
EffUncl	0.367	0.138	2.655	0.008	0.377	0.377
EnactmentAss	-0.068	0.078	-0.873	0.383	-0.072	-0.072
EnactmentAss ~						
EffUncl	-0.375	0.094	-3.976	0.000	-0.362	-0.362
SexTalkL ~						
RQL	-0.020	0.157	-0.125	0.900	-0.011	-0.011
SCSL	0.808	0.103	7.875	0.000	0.766	0.766
EffUncl ~						
SCSL	0.406	0.115	3.544	0.000	0.360	0.360
RQL	0.102	0.165	0.620	0.535	0.052	0.052
AOUndL	0.711	0.175	4.074	0.000	0.498	0.498
ASL	-0.015	0.131	-0.114	0.909	-0.010	-0.010
AOUndL ~						
ASL	0.011	0.076	0.142	0.887	0.011	0.011
ARUndL	2.403	0.923	2.604	0.009	0.940	0.940
ARUndL ~						
ASL	-0.246	0.095	-2.596	0.009	-0.623	-0.623
SCSL	0.148	0.058	2.537	0.011	0.477	0.477
RQL	-0.104	0.055	-1.893	0.058	-0.193	-0.193

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
ASL ~ ~						
RQL	-0.288	0.095	-3.030	0.002	-0.317	-0.317
SCSL	-0.650	0.176	-3.694	0.000	-0.411	-0.411
RQL ~ ~						
SCSL	0.703	0.136	5.180	0.000	0.608	0.608

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.ASUnd1	1.821	0.234	7.786	0.000	1.821	0.595
.ASUnd2	1.541	0.199	7.765	0.000	1.541	0.563
.ASUnd3	1.100	0.143	7.691	0.000	1.100	0.473
.ASUnd4	1.084	0.143	7.566	0.000	1.084	0.374
.ASUnd5	1.261	0.167	7.537	0.000	1.261	0.357
.ASUnd6	1.293	0.168	7.706	0.000	1.293	0.490
.ASUnd7	1.146	0.150	7.644	0.000	1.146	0.430
.ASUnd8	0.958	0.124	7.700	0.000	0.958	0.483
.ASUnd9	0.478	0.071	6.772	0.000	0.478	0.161
.ASUnd10	0.475	0.069	6.921	0.000	0.475	0.180
.ASUnd11	0.393	0.059	6.629	0.000	0.393	0.146
.ASUnd12	0.623	0.087	7.131	0.000	0.623	0.217
.ASUnd13	0.426	0.064	6.629	0.000	0.426	0.146
.ARUnd1	2.926	0.370	7.910	0.000	2.926	0.938
.ARUnd2	3.629	0.459	7.900	0.000	3.629	0.918
.ARUnd3	1.311	0.166	7.887	0.000	1.311	0.891
.ARUnd4	1.028	0.147	6.987	0.000	1.028	0.306
.ARUnd5	1.134	0.159	7.122	0.000	1.134	0.339
.ARUnd6	3.832	0.485	7.899	0.000	3.832	0.915
.ARUnd7	0.768	0.113	6.799	0.000	0.768	0.270
.ARUnd8	2.124	0.271	7.846	0.000	2.124	0.820
.ARUnd9	1.633	0.214	7.629	0.000	1.633	0.573
.ARUnd10	0.949	0.133	7.135	0.000	0.949	0.343
.ARUnd11	1.173	0.163	7.191	0.000	1.173	0.359
.ARUnd12	1.660	0.214	7.751	0.000	1.660	0.690
.AOUnd1	2.246	0.290	7.736	0.000	2.246	0.641
.AOUnd2	0.991	0.133	7.462	0.000	0.991	0.433

.AOUnd3	0.616	0.101	6.109	0.000	0.616	0.171
.AOUnd4	0.476	0.097	4.886	0.000	0.476	0.110
.AOUnd5	1.254	0.172	7.295	0.000	1.254	0.362
.RQ1	0.287	0.042	6.815	0.000	0.287	0.302
.RQ2	0.371	0.051	7.255	0.000	0.371	0.413
.RQ3	1.426	0.189	7.543	0.000	1.426	0.546
.RQ4	0.536	0.073	7.354	0.000	0.536	0.450
.RQ5	0.250	0.054	4.626	0.000	0.250	0.127
.RQ6	0.786	0.116	6.769	0.000	0.786	0.294
.RQ7	1.896	0.249	7.603	0.000	1.896	0.587
.RQ8	2.365	0.308	7.685	0.000	2.365	0.652
.SCS1	0.480	0.086	5.557	0.000	0.480	0.192
.SCS2	2.402	0.310	7.753	0.000	2.402	0.749
.SCS3	0.520	0.088	5.942	0.000	0.520	0.222
.SCS4	1.917	0.251	7.636	0.000	1.917	0.647
.SCS5	1.567	0.207	7.561	0.000	1.567	0.595
.SCS6	0.594	0.087	6.809	0.000	0.594	0.332
.EffUnd1	0.412	0.085	4.865	0.000	0.412	0.138
.EffUnd2	1.599	0.216	7.395	0.000	1.599	0.438
.EffUnd3	0.265	0.070	3.774	0.000	0.265	0.099
.EffUnd4	2.066	0.271	7.631	0.000	2.066	0.577
.SexTalk1	0.590	0.083	7.082	0.000	0.590	0.208
.SexTalk2	0.700	0.098	7.162	0.000	0.700	0.224
.SexTalk3	1.542	0.200	7.722	0.000	1.542	0.506
.SexTalk4	0.433	0.065	6.629	0.000	0.433	0.149
.SexTalk5	1.344	0.177	7.584	0.000	1.344	0.385
.SexTalk6	0.606	0.089	6.842	0.000	0.606	0.171
.SexTalk7	0.202	0.044	4.630	0.000	0.202	0.064
.PlanUnd1	0.475	0.187	2.537	0.011	0.475	0.147
.PlanUnd2	0.257	0.198	1.295	0.195	0.257	0.078
.SchUnd1	2.493	0.321	7.768	0.000	2.493	0.740
.UndisReveal	0.651	0.167	3.906	0.000	0.651	0.212
.UndisShare	0.919	0.186	4.949	0.000	0.919	0.275
ASL	1.241	0.313	3.959	0.000	1.000	1.000
.ARUndL	0.056	0.041	1.368	0.171	0.290	0.290
.AOUndL	0.165	0.057	2.885	0.004	0.131	0.131
RQL	0.663	0.116	5.707	0.000	1.000	1.000
SCSL	2.017	0.315	6.407	0.000	1.000	1.000
.EffUncL	0.936	0.155	6.026	0.000	0.365	0.365
.SexTalkL	0.951	0.164	5.789	0.000	0.423	0.423
.EnactmentAss	2.388	0.383	6.236	0.000	0.869	0.869
.UndLike	1.205	0.226	5.338	0.000	0.497	0.497

```
> fitMeasures(model_undlikeOnlyComp_Latent_fit)
```

npar	fmin	chisq	df	pvalue	
140.000	14.642	3689.735	1690.000		0.000
baseline.chisq	baseline.df	baseline.pvalue	cfi	ti	
9437.633	1770.000	0.000	0.739	0.727	
nnfi	rfi	nfi	pnfi	ifi	
0.727	0.591	0.609	0.582	0.742	
rmi	logl	unrestricted.logl	aic	bic	
0.739	-11721.516	-9876.649	23723.032	24120.111	
ntotal	bic2	rmsea	rmsea.ci.lower	rmsea.ci.upper	
126.000	23677.388	0.097	0.093	0.101	
rmsea.ci.level	rmsea.pvalue	rmsea.close.h0	rmsea.notclose.pvalue	rmsea.notclose.h0	
0.900	0.000	0.050	1.000	0.080	
rmr	rmr_nomean	srmr	srmr_bentler	srmr_bentler_nomean	
0.307	0.307	0.103	0.103	0.103	
crmr	crmr_nomean	srmr_mplus	srmr_mplus_nomean	cn_05	
0.104	0.104	0.103	0.103	62.015	
cn_01	gfi	agfi	pgfi	mfi	
63.430	0.515	0.475	0.475	0.000	
ecvi					
31.506					

Model One: Undisclosed Likelihood of Disclosure Improved Model

lavaan 0.6.15 ended normally after 72 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 86

Number of observations Used Total
 129 326

Model Test User Model:

Test statistic 849.150
 Degrees of freedom 475
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
ASL =~						
ASUnd10	1.000				1.552	0.962
ASUnd11	1.014	0.037	27.318	0.000	1.574	0.964
ASUnd12	0.973	0.050	19.434	0.000	1.510	0.896
ASUnd13	0.995	0.048	20.716	0.000	1.545	0.911
ARUndL =~						
ARUnd4	1.000				1.505	0.830
ARUnd7	0.995	0.077	12.856	0.000	1.497	0.893
ARUnd10	0.917	0.081	11.382	0.000	1.380	0.827
ARUnd11	0.910	0.090	10.062	0.000	1.369	0.762
AOUndL =~						
AOUnd2	1.000				1.164	0.778
AOUnd3	1.428	0.127	11.285	0.000	1.663	0.879
AOUnd4	1.645	0.136	12.133	0.000	1.915	0.928
AOUnd5	1.309	0.126	10.382	0.000	1.524	0.825
RQL =~						
RQ1	1.000				0.778	0.804
RQ4	0.976	0.111	8.764	0.000	0.760	0.700
RQ5	1.721	0.131	13.107	0.000	1.340	0.966
RQ6	1.744	0.159	10.941	0.000	1.357	0.826
SCSL =~						
SCS1	1.000				1.441	0.907
SCS3	0.939	0.064	14.669	0.000	1.354	0.880
SCS5	0.728	0.086	8.435	0.000	1.049	0.641
SCS6	0.754	0.060	12.513	0.000	1.087	0.814
EffUncL =~						
EffUnd1	1.000				1.583	0.929
EffUnd2	0.891	0.080	11.132	0.000	1.410	0.744
EffUnd3	0.971	0.050	19.243	0.000	1.537	0.946
EffUnd4	0.758	0.087	8.698	0.000	1.200	0.640
SexTalkL =~						
SexTlk1	1.000				1.560	0.928
SexTlk2	1.022	0.058	17.607	0.000	1.595	0.903
SexTlk4	1.006	0.053	18.819	0.000	1.570	0.923
SexTlk7	1.068	0.054	19.671	0.000	1.667	0.935
EnactmentAss =~						
PlnUnd1	1.000				1.659	0.929
PlnUnd2	1.041	0.084	12.407	0.000	1.726	0.955
SchUnd1	0.530	0.091	5.814	0.000	0.879	0.479
UndLike =~						
UndsRvl	1.000				1.561	0.890
UndsShr (UL =~)	1.000				1.561	0.855

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
UndLike ~						
ARUndL	-0.288	0.352	-0.818	0.413	-0.278	-0.278
AOUndL	1.088	0.463	2.349	0.019	0.812	0.812
SCSL	-0.556	0.163	-3.406	0.001	-0.513	-0.513
SexTalkL	0.354	0.121	2.921	0.003	0.354	0.354
EffUncL	0.291	0.133	2.192	0.028	0.295	0.295
EnactmentAss	-0.062	0.075	-0.835	0.404	-0.066	-0.066
EnactmentAss ~						
EffUncL	-0.366	0.095	-3.873	0.000	-0.349	-0.349
SexTalkL ~						
RQL	0.105	0.169	0.622	0.534	0.052	0.052
SCSL	0.778	0.100	7.768	0.000	0.719	0.719

```

EffUncL ~
  SCSL    0.364  0.107  3.419  0.001  0.332  0.332
  RQL     0.142  0.166  0.855  0.393  0.070  0.070
  AOUndL  0.679  0.141  4.832  0.000  0.500  0.500
  ASL    -0.048  0.084 -0.570  0.569 -0.047 -0.047
AOUndL ~
  ASL    -0.030  0.048 -0.621  0.535 -0.040 -0.040
  ARUndL  0.705  0.081  8.697  0.000  0.911  0.911
ARUndL ~
  ASL    -0.522  0.074 -7.041  0.000 -0.538 -0.538
  SCSL    0.542  0.098  5.542  0.000  0.519  0.519
  RQL    -0.360  0.166 -2.168  0.030 -0.186 -0.186

```

Covariances:

```

      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
ASL ~ ~
  RQL    -0.313  0.116 -2.690  0.007 -0.259 -0.259
  SCSL   -0.633  0.217 -2.920  0.004 -0.283 -0.283
RQL ~ ~
  SCSL    0.663  0.131  5.075  0.000  0.591  0.591

```

Variances:

```

      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
.ASUnd10  0.196  0.040  4.941  0.000  0.196  0.075
.ASUnd11  0.187  0.040  4.720  0.000  0.187  0.070
.ASUnd12  0.557  0.079  7.069  0.000  0.557  0.196
.ASUnd13  0.488  0.071  6.872  0.000  0.488  0.170
.ARUnd4   1.020  0.149  6.828  0.000  1.020  0.310
.ARUnd7   0.571  0.097  5.863  0.000  0.571  0.203
.ARUnd10  0.879  0.128  6.858  0.000  0.879  0.316
.ARUnd11  1.358  0.186  7.291  0.000  1.358  0.420
.AOUnd2   0.884  0.120  7.369  0.000  0.884  0.395
.AOUnd3   0.816  0.125  6.536  0.000  0.816  0.228
.AOUnd4   0.589  0.112  5.249  0.000  0.589  0.138
.AOUnd5   1.094  0.154  7.107  0.000  1.094  0.320
.RQ1      0.331  0.047  6.992  0.000  0.331  0.353
.RQ4      0.600  0.079  7.556  0.000  0.600  0.510
.RQ5      0.130  0.063  2.068  0.039  0.130  0.067
.RQ6      0.859  0.127  6.757  0.000  0.859  0.318
.SCS1     0.447  0.087  5.150  0.000  0.447  0.177
.SCS3     0.535  0.091  5.889  0.000  0.535  0.226
.SCS5     1.579  0.207  7.614  0.000  1.579  0.589
.SCS6     0.603  0.088  6.832  0.000  0.603  0.338
.EffUnd1  0.395  0.083  4.751  0.000  0.395  0.136
.EffUnd2  1.607  0.215  7.482  0.000  1.607  0.447
.EffUnd3  0.277  0.071  3.893  0.000  0.277  0.105
.EffUnd4  2.073  0.268  7.727  0.000  2.073  0.590
.SexTalk1 0.395  0.067  5.923  0.000  0.395  0.140
.SexTalk2 0.575  0.088  6.531  0.000  0.575  0.184
.SexTalk4 0.431  0.071  6.079  0.000  0.431  0.149
.SexTalk7 0.400  0.071  5.652  0.000  0.400  0.126
.PlanUnd1 0.437  0.195  2.240  0.025  0.437  0.137
.PlanUnd2 0.286  0.206  1.389  0.165  0.286  0.088
.SchUnd1  2.597  0.329  7.885  0.000  2.597  0.771
.UndisReveal 0.643  0.160  4.006  0.000  0.643  0.209
.UndisShare 0.896  0.178  5.027  0.000  0.896  0.269
ASL       2.409  0.325  7.413  0.000  1.000  1.000
.ARUndL   0.939  0.184  5.117  0.000  0.415  0.415
.AOUndL   0.166  0.053  3.119  0.002  0.123  0.123
RQL       0.606  0.112  5.431  0.000  1.000  1.000
SCSL      2.076  0.316  6.563  0.000  1.000  1.000
.EffUncL  0.943  0.155  6.093  0.000  0.376  0.376
.SexTalkL 1.062  0.173  6.141  0.000  0.436  0.436
.EnactmentAss 2.416  0.384  6.285  0.000  0.878  0.878
.UndLike  1.104  0.219  5.049  0.000  0.453  0.453

```

> fitMeasures(model_undlikeOnlyComp_IMPROVE_fit)

```

      npar      fmin      chisq      df      pvalue
 86.000     3.291    849.150     475.000     0.000
baseline.chisq  baseline.df  baseline.pvalue  cfi      ti
4715.875     528.000           0.000     0.911     0.901
  nnfi      rfi      nfi      pnfi      ifi
 0.901     0.800     0.820     0.738     0.912
  rmi      logl  unrestricted.logl      aic      bic
 0.911    -6254.677    -5830.102    12681.353    12927.297
 ntotal      bic2      rmsea      rmsea.ci.lower  rmsea.ci.upper
129.000     12655.308           0.078           0.070           0.087
rmsea.ci.level  rmsea.pvalue  rmsea.close.h0  rmsea.notclose.pvalue  rmsea.notclose.h0
 0.900           0.000           0.050           0.366           0.080
  rmr      rmr_nomean      smmr      smmr_bentler  smmr_bentler_nomean
 0.224           0.224           0.078           0.078           0.078
  crmr      crmr_nomean      smmr_mplus  smmr_mplus_nomean      cn_05

```

0.080	0.080	0.078	0.078	81.031
cn_01	gfi	agfi	pgfi	mfi
84.498	0.724	0.673	0.613	0.235
ecvi				
7.916				

Model Two: Undisclosed Likelihood of to Use Direct-verbal Messages Hypothesized Model

lavaan 0.6.15 ended normally after 111 iterations

Estimator	ML
Optimization method	NLMINB
Number of model parameters	144

	Used	Total
Number of observations	126	326

Model Test User Model:

Test statistic	3733.200
Degrees of freedom	1747
P-value (Chi-square)	0.000

Parameter Estimates:

Standard errors	Standard
Information	Expected
Information saturated (h1) model	Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
EnactmentAss =~						
PlanUnd1	1.000				1.651	0.922
PlanUnd2	1.052	0.083	12.734	0.000	1.737	0.960
SchUnd1	0.568	0.091	6.238	0.000	0.937	0.511
DirVerbal =~						
UndVerDir1	1.000				1.447	0.849
UndVerDir2	1.011	0.097	10.438	0.000	1.462	0.861
UndVerDir3	0.880	0.095	9.289	0.000	1.274	0.759
SexTalkL =~						
SexTalk1	1.000				1.497	0.889
SexTalk2	1.034	0.070	14.677	0.000	1.549	0.876
SexTalk3	0.825	0.084	9.842	0.000	1.235	0.707
SexTalk4	1.052	0.063	16.638	0.000	1.575	0.923
SexTalk5	0.977	0.084	11.682	0.000	1.463	0.783
SexTalk6	1.146	0.071	16.158	0.000	1.715	0.912
SexTalk7	1.154	0.060	19.100	0.000	1.728	0.969
EffUncl =~						
EffUnd1	1.000				1.551	0.918
EffUnd2	0.911	0.082	11.052	0.000	1.413	0.750
EffUnd3	0.977	0.052	18.721	0.000	1.514	0.946
EffUnd4	0.798	0.089	8.957	0.000	1.237	0.661
AOUNdL =~						
AOUNd1	1.000				1.134	0.606
AOUNd2	0.996	0.144	6.906	0.000	1.129	0.747
AOUNd3	1.533	0.194	7.908	0.000	1.738	0.916
AOUNd4	1.734	0.215	8.048	0.000	1.967	0.945
AOUNd5	1.292	0.180	7.167	0.000	1.466	0.788
ARUNdL =~						
ARUNd1	1.000				0.442	0.250
ARUNd2	1.298	0.605	2.146	0.032	0.573	0.288
ARUNd3	0.915	0.401	2.282	0.022	0.404	0.333
ARUNd4	3.452	1.239	2.785	0.005	1.525	0.832
ARUNd5	3.342	1.203	2.777	0.005	1.476	0.808
ARUNd6	1.353	0.627	2.158	0.031	0.598	0.292
ARUNd7	3.277	1.173	2.793	0.005	1.448	0.858
ARUNd8	1.558	0.628	2.481	0.013	0.688	0.428
ARUNd9	2.474	0.915	2.704	0.007	1.093	0.647
ARUNd10	3.081	1.108	2.781	0.005	1.361	0.818
ARUNd11	3.255	1.174	2.773	0.006	1.438	0.795
ARUNd12	1.966	0.745	2.640	0.008	0.868	0.560
SCSL =~						
SCS1	1.000				1.404	0.888
SCS2	0.646	0.106	6.064	0.000	0.906	0.506
SCS3	0.979	0.067	14.558	0.000	1.374	0.896
SCS4	0.751	0.097	7.738	0.000	1.054	0.612
SCS5	0.743	0.090	8.275	0.000	1.043	0.643
SCS6	0.783	0.064	12.265	0.000	1.099	0.822
RQL =~						
RQ1	1.000				0.814	0.835
RQ2	0.892	0.088	10.161	0.000	0.727	0.766
RQ3	1.335	0.158	8.475	0.000	1.087	0.673
RQ4	0.994	0.103	9.690	0.000	0.809	0.742
RQ5	1.612	0.115	13.993	0.000	1.313	0.935
RQ6	1.685	0.144	11.701	0.000	1.372	0.840
RQ7	1.417	0.178	7.966	0.000	1.154	0.642
RQ8	1.380	0.193	7.158	0.000	1.124	0.590
ASL =~						

ASUnd1	1.000			1.112	0.636	
ASUnd2	0.982	0.148	6.649	0.000	1.092	0.660
ASUnd3	0.993	0.138	7.176	0.000	1.105	0.725
ASUnd4	1.209	0.157	7.676	0.000	1.345	0.790
ASUnd5	1.353	0.174	7.759	0.000	1.505	0.801
ASUnd6	1.044	0.147	7.094	0.000	1.161	0.714
ASUnd7	1.106	0.149	7.405	0.000	1.230	0.754
ASUnd8	0.909	0.128	7.124	0.000	1.012	0.718
ASUnd9	1.420	0.166	8.569	0.000	1.580	0.916
ASUnd10	1.323	0.156	8.503	0.000	1.472	0.906
ASUnd11	1.364	0.158	8.624	0.000	1.517	0.924
ASUnd12	1.351	0.161	8.363	0.000	1.502	0.886
ASUnd13	1.419	0.165	8.626	0.000	1.579	0.925

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DirVerbal ~						
ARUndL	1.914	1.280	1.495	0.135	0.584	0.584
AOUndL	-0.226	0.421	-0.538	0.591	-0.178	-0.178
SCSL	-0.304	0.165	-1.845	0.065	-0.295	-0.295
SexTalkL	0.281	0.193	1.454	0.146	0.291	0.291
EffUncl	0.172	0.198	0.871	0.384	0.185	0.185
EnactmentAss	0.112	0.081	1.388	0.165	0.128	0.128
EnactmentAss ~						
EffUncl	-0.371	0.097	-3.811	0.000	-0.348	-0.348
SexTalkL ~						
RQL	0.022	0.162	0.137	0.891	0.012	0.012
SCSL	0.773	0.106	7.292	0.000	0.725	0.725
EffUncl ~						
SCSL	-0.150	0.115	-1.310	0.190	-0.136	-0.136
RQL	0.096	0.130	0.744	0.457	0.051	0.051
AOUndL	0.515	0.133	3.869	0.000	0.377	0.377
ASL	-0.156	0.105	-1.486	0.137	-0.112	-0.112
SexTalkL	0.705	0.089	7.956	0.000	0.681	0.681
AOUndL ~						
ASL	-0.005	0.077	-0.058	0.953	-0.004	-0.004
ARUndL	2.381	0.908	2.623	0.009	0.927	0.927
ARUndL ~						
ASL	-0.247	0.095	-2.610	0.009	-0.622	-0.622
SCSL	0.148	0.058	2.541	0.011	0.471	0.471
RQL	-0.100	0.054	-1.849	0.064	-0.185	-0.185

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
SCSL ~~						
RQL	0.694	0.135	5.158	0.000	0.607	0.607
ASL	-0.637	0.174	-3.666	0.000	-0.408	-0.408
RQL ~~						
ASL	-0.287	0.095	-3.026	0.002	-0.317	-0.317

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.PlanUnd1	0.479	0.187	2.561	0.010	0.479	0.150
.PlanUnd2	0.253	0.199	1.276	0.202	0.253	0.077
.SchUnd1	2.487	0.320	7.766	0.000	2.487	0.739
.UndVerDir1	0.812	0.172	4.720	0.000	0.812	0.280
.UndVerDir2	0.745	0.169	4.404	0.000	0.745	0.258
.UndVerDir3	1.190	0.188	6.337	0.000	1.190	0.423
.SexTalk1	0.594	0.083	7.133	0.000	0.594	0.209
.SexTalk2	0.724	0.100	7.234	0.000	0.724	0.232
.SexTalk3	1.524	0.197	7.728	0.000	1.524	0.500
.SexTalk4	0.434	0.065	6.703	0.000	0.434	0.149
.SexTalk5	1.352	0.178	7.605	0.000	1.352	0.387
.SexTalk6	0.594	0.086	6.873	0.000	0.594	0.168
.SexTalk7	0.197	0.042	4.699	0.000	0.197	0.062
.EffUnd1	0.451	0.082	5.492	0.000	0.451	0.158
.EffUnd2	1.552	0.210	7.398	0.000	1.552	0.437
.EffUnd3	0.270	0.064	4.208	0.000	0.270	0.105
.EffUnd4	1.975	0.259	7.615	0.000	1.975	0.563
.AOUnd1	2.218	0.287	7.725	0.000	2.218	0.633
.AOUnd2	1.012	0.135	7.472	0.000	1.012	0.442
.AOUnd3	0.577	0.098	5.904	0.000	0.577	0.160
.AOUnd4	0.466	0.098	4.757	0.000	0.466	0.107
.AOUnd5	1.315	0.179	7.332	0.000	1.315	0.380
.ARUnd1	2.924	0.370	7.910	0.000	2.924	0.937
.ARUnd2	3.625	0.459	7.900	0.000	3.625	0.917
.ARUnd3	1.307	0.166	7.886	0.000	1.307	0.889
.ARUnd4	1.033	0.148	6.997	0.000	1.033	0.308
.ARUnd5	1.161	0.162	7.156	0.000	1.161	0.348
.ARUnd6	3.830	0.485	7.899	0.000	3.830	0.915
.ARUnd7	0.748	0.111	6.763	0.000	0.748	0.263
.ARUnd8	2.116	0.270	7.845	0.000	2.116	0.817

```

.ARUnd9      1.655  0.217  7.639  0.000  1.655  0.581
.ARUnd10     0.917  0.129  7.095  0.000  0.917  0.331
.ARUnd11     1.202  0.166  7.222  0.000  1.202  0.368
.ARUnd12     1.653  0.213  7.749  0.000  1.653  0.687
.SCS1        0.526  0.092  5.732  0.000  0.526  0.211
.SCS2        2.384  0.308  7.741  0.000  2.384  0.744
.SCS3        0.461  0.083  5.531  0.000  0.461  0.196
.SCS4        1.853  0.244  7.595  0.000  1.853  0.625
.SCS5        1.547  0.205  7.535  0.000  1.547  0.587
.SCS6        0.582  0.086  6.731  0.000  0.582  0.325
.RQ1         0.287  0.042  6.814  0.000  0.287  0.302
.RQ2         0.371  0.051  7.257  0.000  0.371  0.413
.RQ3         1.428  0.189  7.545  0.000  1.428  0.547
.RQ4         0.536  0.073  7.354  0.000  0.536  0.450
.RQ5         0.248  0.054  4.608  0.000  0.248  0.126
.RQ6         0.788  0.116  6.774  0.000  0.788  0.295
.RQ7         1.900  0.250  7.606  0.000  1.900  0.588
.RQ8         2.366  0.308  7.686  0.000  2.366  0.652
.ASUnd1      1.824  0.234  7.787  0.000  1.824  0.596
.ASUnd2      1.545  0.199  7.767  0.000  1.545  0.564
.ASUnd3      1.103  0.143  7.693  0.000  1.103  0.475
.ASUnd4      1.091  0.144  7.570  0.000  1.091  0.376
.ASUnd5      1.266  0.168  7.541  0.000  1.266  0.359
.ASUnd6      1.293  0.168  7.707  0.000  1.293  0.489
.ASUnd7      1.148  0.150  7.646  0.000  1.148  0.431
.ASUnd8      0.960  0.125  7.702  0.000  0.960  0.484
.ASUnd9      0.478  0.071  6.775  0.000  0.478  0.161
.ASUnd10     0.472  0.068  6.915  0.000  0.472  0.179
.ASUnd11     0.392  0.059  6.631  0.000  0.392  0.146
.ASUnd12     0.621  0.087  7.130  0.000  0.621  0.216
.ASUnd13     0.422  0.064  6.622  0.000  0.422  0.145
.EnactmentAss 2.396  0.385  6.223  0.000  0.879  0.879
.DirVerbal   1.454  0.281  5.177  0.000  0.695  0.695
.SexTalkL   1.041  0.177  5.882  0.000  0.464  0.464
.EffUncL    0.510  0.097  5.237  0.000  0.212  0.212
.AOUndL     0.172  0.059  2.945  0.003  0.134  0.134
.ARUndL     0.058  0.042  1.378  0.168  0.297  0.297
.SCSL       1.970  0.314  6.275  0.000  1.000  1.000
.RQL        0.663  0.116  5.710  0.000  1.000  1.000
.ASL        1.237  0.313  3.952  0.000  1.000  1.000

> fitMeasures(model_undlikeDirVer_Latent_fit)
      npar      fmin      chisq      df      pvalue
144.000    14.814    3733.200    1747.000      0.000
baseline.chisq  baseline.df  baseline.pvalue      cfi      tli
9575.252    1830.000      0.000      0.744      0.731
      nnfi      rfi      nfi      pnfi      ifi
0.731      0.592      0.610      0.582      0.746
      rmi      logl  unrestricted.logl      aic      bic
0.744    -11900.494    -10033.894    24088.989    24497.413
ntotal      bic2      rmsea      rmsea.ci.lower  rmsea.ci.upper
126.000    24042.041      0.095      0.091      0.099
rmsea.ci.level  rmsea.pvalue  rmsea.close.h0  rmsea.notclose.pvalue  rmsea.notclose.h0
0.900      0.000      0.050      1.000      0.080
      rmr      rmr_nomean      smmr      smmr_bentler  smmr_bentler_nomean
0.293      0.293      0.099      0.099      0.099
      crmr      crmr_nomean      smmr_mplus      smmr_mplus_nomean      cn_05
0.100      0.100      0.099      0.099      63.283
cn_01      gfi      agfi      pgfi      mfi
64.704      0.520      0.480      0.480      0.000
ecvi
31.914

```

Model Two: Undisclosed Likelihood of to Use Direct-verbal Messages Improved Model

lavaan 0.6.15 ended normally after 73 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 90

Number of observations Used Total
 129 326

Model Test User Model:

Test statistic 848.075
 Degrees of freedom 505
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
ASL =~						
ASUnd10	1.000				1.553	0.962
ASUnd11	1.013	0.037	27.308	0.000	1.573	0.964
ASUnd12	0.972	0.050	19.467	0.000	1.510	0.897
ASUnd13	0.995	0.048	20.769	0.000	1.545	0.911
ARUndL =~						
ARUnd4	1.000				1.495	0.825
ARUnd7	1.003	0.079	12.772	0.000	1.500	0.894
ARUnd10	0.933	0.081	11.480	0.000	1.395	0.836
ARUnd11	0.908	0.092	9.880	0.000	1.357	0.755
AOUndL =~						
AOUnd2	1.000				1.154	0.771
AOUnd3	1.454	0.129	11.233	0.000	1.678	0.887
AOUnd4	1.668	0.139	11.970	0.000	1.924	0.932
AOUnd5	1.299	0.130	10.027	0.000	1.499	0.811
RQL =~						
RQ1	1.000				0.778	0.804
RQ4	0.977	0.111	8.769	0.000	0.760	0.701
RQ5	1.722	0.131	13.112	0.000	1.340	0.966
RQ6	1.743	0.159	10.936	0.000	1.357	0.825
SCSL =~						
SCS1	1.000				1.422	0.895
SCS3	0.970	0.066	14.753	0.000	1.380	0.897
SCS5	0.748	0.088	8.509	0.000	1.063	0.650
SCS6	0.770	0.062	12.405	0.000	1.095	0.820
EffUncL =~						
EffUnd1	1.000				1.542	0.918
EffUnd2	0.911	0.082	11.118	0.000	1.405	0.748
EffUnd3	0.982	0.052	18.859	0.000	1.514	0.946
EffUnd4	0.788	0.089	8.885	0.000	1.215	0.653
SexTalkL =~						
SexTalk1	1.000				1.552	0.923
SexTalk2	1.015	0.060	16.799	0.000	1.575	0.892
SexTalk4	1.017	0.054	18.896	0.000	1.578	0.927
SexTalk7	1.083	0.054	19.975	0.000	1.681	0.943
EnactmentAss =~						
PlanUnd1	1.000				1.650	0.925
PlanUnd2	1.048	0.085	12.317	0.000	1.729	0.958
SchUnd1	0.534	0.091	5.842	0.000	0.881	0.480
DirVerbal =~						
UndVerDir1	1.000				1.439	0.850
UndVerDir2	1.005	0.095	10.618	0.000	1.447	0.860
UndVerDir3	0.877	0.093	9.418	0.000	1.262	0.759

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DirVerbal ~						
ARUndL	0.787	0.365	2.157	0.031	0.818	0.818
AOUndL	-0.486	0.473	-1.027	0.305	-0.389	-0.389
SCSL	-0.291	0.154	-1.893	0.058	-0.288	-0.288
SexTalkL	0.252	0.179	1.404	0.160	0.272	0.272
EffUncL	0.174	0.193	0.904	0.366	0.186	0.186
EnactmentAss	0.087	0.078	1.120	0.263	0.100	0.100
EnactmentAss ~						
EffUncL	-0.361	0.097	-3.722	0.000	-0.337	-0.337
SexTalkL ~						
RQL	0.129	0.174	0.741	0.459	0.065	0.065

```

SCSL      0.744  0.104  7.120  0.000  0.681  0.681
EffUncl ~
SCSL      -0.142  0.108  -1.317  0.188  -0.131  -0.131
RQL       0.072  0.133  0.541  0.589  0.036  0.036
AOUndL    0.557  0.115  4.863  0.000  0.417  0.417
ASL       -0.123  0.068  -1.820  0.069  -0.124  -0.124
SexTalkL  0.656  0.083  7.937  0.000  0.661  0.661
AOUndL ~
ASL       -0.035  0.047  -0.744  0.457  -0.047  -0.047
ARUndL    0.698  0.082  8.558  0.000  0.905  0.905
ARUndL ~
ASL       -0.520  0.073  -7.088  0.000  -0.540  -0.540
SCSL      0.546  0.099  5.519  0.000  0.519  0.519
RQL       -0.351  0.165  -2.131  0.033  -0.183  -0.183

```

Covariances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
ASL ~ ~
RQL      -0.312  0.116  -2.686  0.007  -0.258  -0.258
SCSL     -0.614  0.214  -2.868  0.004  -0.278  -0.278
RQL ~ ~
SCSL     0.657  0.130  5.070  0.000  0.594  0.594

```

Variances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
.ASUnd10  0.194  0.039  4.913  0.000  0.194  0.074
.ASUnd11  0.189  0.040  4.775  0.000  0.189  0.071
.ASUnd12  0.557  0.079  7.069  0.000  0.557  0.196
.ASUnd13  0.487  0.071  6.870  0.000  0.487  0.169
.ARUnd4   1.048  0.152  6.916  0.000  1.048  0.319
.ARUnd7   0.562  0.095  5.892  0.000  0.562  0.200
.ARUnd10  0.838  0.123  6.816  0.000  0.838  0.301
.ARUnd11  1.391  0.189  7.347  0.000  1.391  0.430
.AOUnd2   0.908  0.123  7.384  0.000  0.908  0.406
.AOUnd3   0.766  0.120  6.360  0.000  0.766  0.214
.AOUnd4   0.555  0.111  5.004  0.000  0.555  0.130
.AOUnd5   1.171  0.163  7.179  0.000  1.171  0.343
.RQ1      0.331  0.047  6.992  0.000  0.331  0.353
.RQ4      0.600  0.079  7.556  0.000  0.600  0.509
.RQ5      0.129  0.063  2.055  0.040  0.129  0.067
.RQ6      0.860  0.127  6.762  0.000  0.860  0.319
.SCS1     0.501  0.093  5.394  0.000  0.501  0.199
.SCS3     0.463  0.087  5.345  0.000  0.463  0.196
.SCS5     1.548  0.204  7.574  0.000  1.548  0.578
.SCS6     0.585  0.087  6.720  0.000  0.585  0.328
.EffUnd1  0.445  0.081  5.491  0.000  0.445  0.158
.EffUnd2  1.554  0.208  7.483  0.000  1.554  0.440
.EffUnd3  0.272  0.065  4.207  0.000  0.272  0.106
.EffUnd4  1.990  0.258  7.715  0.000  1.990  0.574
.SexTalk1 0.421  0.068  6.214  0.000  0.421  0.149
.SexTalk2 0.637  0.094  6.807  0.000  0.637  0.204
.SexTalk4 0.406  0.067  6.076  0.000  0.406  0.140
.SexTalk7 0.352  0.064  5.476  0.000  0.352  0.111
.PlanUnd1 0.458  0.195  2.341  0.019  0.458  0.144
.PlanUnd2 0.265  0.208  1.276  0.202  0.265  0.082
.SchUnd1  2.590  0.329  7.884  0.000  2.590  0.769
.UndVerDir1 0.794  0.166  4.772  0.000  0.794  0.277
.UndVerDir2 0.735  0.163  4.513  0.000  0.735  0.260
.UndVerDir3 1.172  0.182  6.431  0.000  1.172  0.424
ASL       2.411  0.325  7.420  0.000  1.000  1.000
.ARUndL   0.923  0.181  5.104  0.000  0.413  0.413
.AOUndL   0.166  0.052  3.171  0.002  0.125  0.125
RQL       0.606  0.112  5.432  0.000  1.000  1.000
SCSL     2.022  0.316  6.408  0.000  1.000  1.000
.EffUncl 0.517  0.099  5.203  0.000  0.217  0.217
.SexTalkL 1.153  0.185  6.225  0.000  0.479  0.479
.EnactmentAss 2.412  0.386  6.253  0.000  0.886  0.886
.DirVerbal 1.350  0.271  4.988  0.000  0.652  0.652

```

> fitMeasures(model_undlikeDirVer_Latent_fit)

```

npar      90.000      fmin      3.287      chisq      848.075      df      505.000      pvalue      0.000
baseline.chisq      4800.234      baseline.df      561.000      baseline.pvalue      0.000      cfi      0.919      tli      0.910
nnfi      0.910      rfi      0.804      nfi      0.823      pnfi      0.741      ifi      0.920
rmi      0.919      logl      unrestricted.logl      aic      13057.851      bic      13315.234
ntotal      129.000      bic2      13030.594      rmsea      0.073      rmsea.ci.lower      0.064      rmsea.ci.upper      0.081
rmsea.ci.level      0.900      rmsea.pvalue      0.000      rmsea.close.h0      0.050      rmsea.notclose.pvalue      0.074      rmsea.notclose.h0      0.080

```

rnr	rnr_nomean	srmr	srmr_bentler	srmr_bentler_nomean	
0.188	0.188	0.068	0.068	0.068	
cmr	cmr_nomean	srmr_mplus	srmr_mplus_nomean		cn_05
0.069	0.069	0.067	0.067	85.936	
cn_01	gfi	agfi	pgfi	mfi	
89.506	0.733	0.686	0.622	0.265	
ecvi					
7.970					

Model Two: Undisclosed Likelihood of to Use Indirect-verbal Messages Hypothesized Model

lavaan 0.6.15 ended normally after 112 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 145

Number of observations Used Total
 126 326

Model Test User Model:

Test statistic 3923.849
 Degrees of freedom 1808
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
IndirVerbal =~						
UndVerInd1	1.000				1.840	0.932
UndVerInd2	0.783	0.074	10.527	0.000	1.441	0.797
UndVerInd3	0.726	0.081	8.945	0.000	1.336	0.704
UndVerInd4	0.615	0.088	6.957	0.000	1.132	0.580
EnactmentAss =~						
PlanUnd1	1.000				1.673	0.932
PlanUnd2	1.031	0.079	12.972	0.000	1.724	0.951
SchUnd1	0.560	0.090	6.215	0.000	0.937	0.511
SexTalkL =~						
SexTalk1	1.000				1.499	0.890
SexTalk2	1.038	0.070	14.830	0.000	1.555	0.880
SexTalk3	0.819	0.084	9.752	0.000	1.228	0.703
SexTalk4	1.051	0.063	16.662	0.000	1.576	0.923
SexTalk5	0.978	0.083	11.727	0.000	1.466	0.784
SexTalk6	1.143	0.071	16.111	0.000	1.713	0.911
SexTalk7	1.152	0.060	19.060	0.000	1.727	0.968
EffUndL =~						
EffUnd1	1.000				1.597	0.926
EffUnd2	0.894	0.081	11.083	0.000	1.428	0.747
EffUnd3	0.976	0.051	19.217	0.000	1.558	0.952
EffUnd4	0.772	0.088	8.817	0.000	1.233	0.651
AOUndL =~						
AOUnd1	1.000				1.128	0.603
AOUnd2	1.008	0.146	6.904	0.000	1.138	0.752
AOUnd3	1.536	0.196	7.839	0.000	1.733	0.914
AOUnd4	1.737	0.218	7.975	0.000	1.960	0.942
AOUnd5	1.312	0.183	7.173	0.000	1.480	0.795
ARUndL =~						
ARUnd1	1.000				0.450	0.255
ARUnd2	1.311	0.596	2.201	0.028	0.590	0.297
ARUnd3	0.894	0.387	2.309	0.021	0.402	0.332
ARUnd4	3.383	1.191	2.841	0.004	1.522	0.831
ARUnd5	3.290	1.161	2.834	0.005	1.481	0.810
ARUnd6	1.372	0.619	2.218	0.027	0.617	0.302
ARUnd7	3.205	1.125	2.849	0.004	1.442	0.855
ARUnd8	1.520	0.604	2.516	0.012	0.684	0.425
ARUnd9	2.463	0.892	2.762	0.006	1.108	0.657
ARUnd10	2.990	1.055	2.834	0.005	1.345	0.809
ARUnd11	3.209	1.134	2.830	0.005	1.444	0.799
ARUnd12	1.918	0.714	2.685	0.007	0.863	0.556
SCSL =~						
SCS1	1.000				1.418	0.898
SCS2	0.628	0.105	5.965	0.000	0.891	0.498
SCS3	0.954	0.066	14.446	0.000	1.354	0.883
SCS4	0.729	0.096	7.594	0.000	1.034	0.601
SCS5	0.727	0.089	8.203	0.000	1.031	0.635
SCS6	0.768	0.063	12.260	0.000	1.089	0.814
RQL =~						
RQ1	1.000				0.814	0.835
RQ2	0.892	0.088	10.154	0.000	0.726	0.766
RQ3	1.336	0.158	8.479	0.000	1.088	0.673
RQ4	0.994	0.103	9.682	0.000	0.809	0.741
RQ5	1.612	0.115	13.985	0.000	1.313	0.935
RQ6	1.686	0.144	11.699	0.000	1.372	0.840
RQ7	1.419	0.178	7.976	0.000	1.155	0.643
RQ8	1.381	0.193	7.163	0.000	1.124	0.590

ASL =~						
ASUnd1	1.000		1.115	0.637		
ASUnd2	0.981	0.147	6.676	0.000	1.094	0.661
ASUnd3	0.992	0.138	7.204	0.000	1.107	0.726
ASUnd4	1.208	0.157	7.713	0.000	1.348	0.792
ASUnd5	1.352	0.173	7.793	0.000	1.507	0.802
ASUnd6	1.042	0.146	7.113	0.000	1.162	0.715
ASUnd7	1.105	0.149	7.434	0.000	1.232	0.755
ASUnd8	0.908	0.127	7.149	0.000	1.013	0.719
ASUnd9	1.416	0.165	8.600	0.000	1.579	0.916
ASUnd10	1.318	0.155	8.528	0.000	1.470	0.905
ASUnd11	1.360	0.157	8.655	0.000	1.517	0.924
ASUnd12	1.346	0.160	8.391	0.000	1.502	0.885
ASUnd13	1.414	0.163	8.654	0.000	1.577	0.924

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
IndirVerbal ~						
ARUndL	-4.519	2.211	-2.044	0.041	-1.105	-1.105
AOUndL	1.732	0.657	2.634	0.008	1.062	1.062
SCSL	0.176	0.247	0.712	0.476	0.135	0.135
SexTalkL	0.174	0.182	0.956	0.339	0.142	0.142
EffUnclL	-0.045	0.193	-0.231	0.817	-0.039	-0.039
EnactmentAss	0.164	0.109	1.502	0.133	0.149	0.149
EnactmentAss ~						
EffUnclL	-0.386	0.095	-4.065	0.000	-0.368	-0.368
SexTalkL ~						
RQL	-0.034	0.158	-0.217	0.828	-0.019	-0.019
SCSL	0.815	0.104	7.871	0.000	0.771	0.771
EffUnclL ~						
SCSL	0.409	0.115	3.555	0.000	0.364	0.364
RQL	0.095	0.165	0.574	0.566	0.048	0.048
AOUndL	0.695	0.173	4.026	0.000	0.491	0.491
ASL	-0.024	0.130	-0.187	0.852	-0.017	-0.017
AOUndL ~						
ASL	0.019	0.075	0.255	0.799	0.019	0.019
ARUndL	2.374	0.889	2.671	0.008	0.947	0.947
ARUndL ~						
ASL	-0.253	0.095	-2.662	0.008	-0.628	-0.628
SCSL	0.151	0.058	2.596	0.009	0.477	0.477
RQL	-0.106	0.055	-1.913	0.056	-0.192	-0.192

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
SCSL ~~						
RQL	0.707	0.136	5.199	0.000	0.612	0.612
ASL	-0.647	0.176	-3.681	0.000	-0.409	-0.409
RQL ~~						
ASL	-0.289	0.095	-3.033	0.002	-0.318	-0.318

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.UndVerInd1	0.510	0.217	2.346	0.019	0.510	0.131
.UndVerInd2	1.191	0.201	5.935	0.000	1.191	0.364
.UndVerInd3	1.817	0.261	6.969	0.000	1.817	0.504
.UndVerInd4	2.527	0.337	7.487	0.000	2.527	0.664
.PlanUnd1	0.424	0.186	2.284	0.022	0.424	0.131
.PlanUnd2	0.315	0.193	1.634	0.102	0.315	0.096
.SchUnd1	2.492	0.321	7.763	0.000	2.492	0.739
.SexTalk1	0.591	0.083	7.083	0.000	0.591	0.208
.SexTalk2	0.703	0.098	7.167	0.000	0.703	0.225
.SexTalk3	1.542	0.200	7.722	0.000	1.542	0.506
.SexTalk4	0.433	0.065	6.629	0.000	0.433	0.149
.SexTalk5	1.344	0.177	7.584	0.000	1.344	0.385
.SexTalk6	0.603	0.088	6.834	0.000	0.603	0.170
.SexTalk7	0.202	0.044	4.625	0.000	0.202	0.064
.EffUnd1	0.426	0.087	4.917	0.000	0.426	0.143
.EffUnd2	1.610	0.217	7.402	0.000	1.610	0.441
.EffUnd3	0.250	0.071	3.536	0.000	0.250	0.093
.EffUnd4	2.061	0.270	7.630	0.000	2.061	0.576
.AOUnd1	2.231	0.289	7.729	0.000	2.231	0.637
.AOUnd2	0.993	0.133	7.459	0.000	0.993	0.434
.AOUnd3	0.594	0.099	6.003	0.000	0.594	0.165
.AOUnd4	0.491	0.099	4.962	0.000	0.491	0.113
.AOUnd5	1.273	0.174	7.303	0.000	1.273	0.367
.ARUnd1	2.916	0.369	7.910	0.000	2.916	0.935
.ARUnd2	3.606	0.456	7.899	0.000	3.606	0.912
.ARUnd3	1.309	0.166	7.888	0.000	1.309	0.890
.ARUnd4	1.040	0.148	7.034	0.000	1.040	0.310
.ARUnd5	1.148	0.160	7.165	0.000	1.148	0.344
.ARUnd6	3.807	0.482	7.897	0.000	3.807	0.909
.ARUnd7	0.763	0.112	6.829	0.000	0.763	0.268

```

.ARUnd8      2.122  0.270  7.849  0.000  2.122  0.819
.ARUnd9      1.621  0.212  7.634  0.000  1.621  0.569
.ARUnd10     0.958  0.134  7.174  0.000  0.958  0.346
.ARUnd11     1.183  0.164  7.225  0.000  1.183  0.362
.ARUnd12     1.662  0.214  7.758  0.000  1.662  0.691
.SCS1        0.486  0.088  5.542  0.000  0.486  0.194
.SCS2        2.412  0.311  7.753  0.000  2.412  0.752
.SCS3        0.517  0.088  5.884  0.000  0.517  0.220
.SCS4        1.894  0.249  7.620  0.000  1.894  0.639
.SCS5        1.572  0.208  7.556  0.000  1.572  0.596
.SCS6        0.603  0.089  6.813  0.000  0.603  0.337
.RQ1         0.287  0.042  6.816  0.000  0.287  0.302
.RQ2         0.372  0.051  7.258  0.000  0.372  0.413
.RQ3         1.427  0.189  7.545  0.000  1.427  0.547
.RQ4         0.536  0.073  7.356  0.000  0.536  0.450
.RQ5         0.248  0.054  4.615  0.000  0.248  0.126
.RQ6         0.787  0.116  6.773  0.000  0.787  0.295
.RQ7         1.897  0.249  7.605  0.000  1.897  0.587
.RQ8         2.364  0.308  7.685  0.000  2.364  0.652
.ASUnd1      1.818  0.233  7.785  0.000  1.818  0.594
.ASUnd2      1.540  0.198  7.765  0.000  1.540  0.562
.ASUnd3      1.099  0.143  7.690  0.000  1.099  0.473
.ASUnd4      1.083  0.143  7.564  0.000  1.083  0.373
.ASUnd5      1.258  0.167  7.536  0.000  1.258  0.356
.ASUnd6      1.292  0.168  7.706  0.000  1.292  0.489
.ASUnd7      1.144  0.150  7.642  0.000  1.144  0.430
.ASUnd8      0.958  0.124  7.700  0.000  0.958  0.483
.ASUnd9      0.480  0.071  6.776  0.000  0.480  0.161
.ASUnd10     0.477  0.069  6.924  0.000  0.477  0.181
.ASUnd11     0.394  0.059  6.632  0.000  0.394  0.146
.ASUnd12     0.623  0.087  7.130  0.000  0.623  0.216
.ASUnd13     0.427  0.064  6.634  0.000  0.427  0.147
.IndirVerbal 2.730  0.501  5.454  0.000  0.806  0.806
.EnactmentAss 2.419  0.384  6.308  0.000  0.864  0.864
.SexTalkL    0.948  0.164  5.778  0.000  0.422  0.422
.EffUncL     0.934  0.155  6.021  0.000  0.366  0.366
.AOUndL      0.166  0.058  2.888  0.004  0.130  0.130
.ARUndL      0.058  0.041  1.405  0.160  0.285  0.285
SCSL         2.011  0.315  6.388  0.000  1.000  1.000
RQL          0.663  0.116  5.709  0.000  1.000  1.000
ASL          1.244  0.314  3.965  0.000  1.000  1.000

```

```
> fitMeasures(model_undlikeIndVer_Latent_fit)
```

```

      npar      fmin      chisq      df      pvalue
145.000    15.571    3923.849    1808.000    0.000
baseline.chisq  baseline.df  baseline.pvalue  cfi  tli
9714.810    1891.000      0.000      0.730    0.717
      nnfi      rfi      nfi      pnfi      ifi
0.717      0.578      0.596      0.570      0.732
      rmi      logl  unrestricted.logl      aic      bic
0.730    -12225.587    -10263.662    24741.174    25152.435
ntotal      bic2      rmsea      rmsea.ci.lower  rmsea.ci.upper
126.000    24693.900      0.096      0.092      0.100
rmsea.ci.level  rmsea.pvalue  rmsea.close.h0  rmsea.notclose.pvalue  rmsea.notclose.h0
0.900      0.000      0.050      1.000      0.080
      rmr      rmr_nomean      srmr      smmr_bentler  smmr_bentler_nomean
0.312      0.312      0.103      0.103      0.103
      crmr      crmr_nomean      srmr_mplus      srmr_mplus_nomean      cn_05
0.105      0.105      0.103      0.103      62.270
cn_01      gfi      agfi      pgfi      mfi
63.644      0.512      0.473      0.474      0.000
ecvi
33.443

```

Model Two: Undisclosed Likelihood of to Use Indirect-verbal Messages Improved Model

lavaan 0.6.15 ended normally after 77 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 92

Number of observations Used Total
 129 326

Model Test User Model:

Test statistic 917.607
 Degrees of freedom 538
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
IndirVerbal =~						
UndVerInd1	1.000				1.825	0.929
UndVerInd2	0.796	0.074	10.708	0.000	1.454	0.803
UndVerInd3	0.733	0.080	9.120	0.000	1.337	0.709
UndVerInd4	0.599	0.088	6.800	0.000	1.094	0.565
ASL =~						
ASUnd10	1.000				1.553	0.962
ASUnd11	1.013	0.037	27.297	0.000	1.573	0.964
ASUnd12	0.973	0.050	19.467	0.000	1.510	0.897
ASUnd13	0.995	0.048	20.770	0.000	1.545	0.912
ARUndL =~						
ARUnd4	1.000				1.502	0.829
ARUnd7	0.998	0.077	12.876	0.000	1.499	0.894
ARUnd10	0.917	0.081	11.337	0.000	1.377	0.825
ARUnd11	0.912	0.091	10.062	0.000	1.370	0.762
AOUndL =~						
AOUnd2	1.000				1.165	0.778
AOUnd3	1.434	0.126	11.351	0.000	1.671	0.883
AOUnd4	1.642	0.136	12.104	0.000	1.912	0.927
AOUnd5	1.300	0.126	10.294	0.000	1.514	0.819
RQL =~						
RQ1	1.000				0.779	0.804
RQ4	0.977	0.111	8.771	0.000	0.760	0.701
RQ5	1.721	0.131	13.110	0.000	1.340	0.966
RQ6	1.743	0.159	10.938	0.000	1.357	0.826
SCSL =~						
SCS1	1.000				1.425	0.897
SCS3	0.965	0.066	14.725	0.000	1.376	0.894
SCS5	0.747	0.088	8.527	0.000	1.064	0.650
SCS6	0.767	0.062	12.404	0.000	1.094	0.819
EffUncl =~						
EffUnd1	1.000				1.539	0.916
EffUnd2	0.912	0.082	11.055	0.000	1.403	0.746
EffUnd3	0.988	0.052	18.934	0.000	1.520	0.949
EffUnd4	0.788	0.089	8.844	0.000	1.212	0.651
SexTalkL =~						
SexTalk1	1.000				1.552	0.923
SexTalk2	1.015	0.060	16.792	0.000	1.575	0.892
SexTalk4	1.016	0.054	18.899	0.000	1.578	0.927
SexTalk7	1.083	0.054	19.991	0.000	1.681	0.943
EnactmentAss =~						
PlanUnd1	1.000				1.674	0.939
PlanUnd2	1.018	0.081	12.597	0.000	1.704	0.944
SchUnd1	0.524	0.091	5.775	0.000	0.877	0.478

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
IndirVerbal ~						
ARUndL	-1.279	0.557	-2.297	0.022	-1.053	-1.053
AOUndL	1.853	0.732	2.533	0.011	1.182	1.182
SCSL	-0.104	0.210	-0.494	0.621	-0.081	-0.081
SexTalkL	0.430	0.249	1.729	0.084	0.365	0.365
EffUncl	-0.225	0.267	-0.842	0.400	-0.190	-0.190
EnactmentAss	0.203	0.106	1.910	0.056	0.186	0.186
EnactmentAss ~						
EffUncl	-0.377	0.098	-3.847	0.000	-0.346	-0.346
SexTalkL ~						

```

RQL      0.114  0.175  0.653  0.514  0.057  0.057
SCSL     0.749  0.105  7.165  0.000  0.688  0.688
EffUncL ~
SCSL     -0.149  0.108 -1.380  0.168 -0.138 -0.138
RQL      0.083  0.133  0.622  0.534  0.042  0.042
AOUndL   0.549  0.112  4.880  0.000  0.415  0.415
ASL     -0.127  0.067 -1.895  0.058 -0.128 -0.128
SexTalkL 0.657  0.083  7.945  0.000  0.663  0.663
AOUndL ~
ASL     -0.022  0.046 -0.468  0.640 -0.029 -0.029
ARUndL   0.713  0.081  8.769  0.000  0.920  0.920
ARUndL ~
ASL     -0.528  0.074 -7.174  0.000 -0.545 -0.545
SCSL     0.546  0.099  5.516  0.000  0.518  0.518
RQL     -0.362  0.166 -2.181  0.029 -0.188 -0.188

```

Covariances:

```

      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
ASL ~ ~
RQL   -0.312  0.116 -2.688  0.007 -0.258 -0.258
SCSL  -0.620  0.215 -2.887  0.004 -0.280 -0.280
RQL ~ ~
SCSL   0.662  0.130  5.088  0.000  0.597  0.597

```

Variances:

```

      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
.UndVerInd1  0.528  0.213  2.477  0.013  0.528  0.137
.UndVerInd2  1.168  0.198  5.907  0.000  1.168  0.356
.UndVerInd3  1.770  0.253  7.010  0.000  1.770  0.497
.UndVerInd4  2.556  0.336  7.606  0.000  2.556  0.681
.ASUnd10     0.194  0.039  4.917  0.000  0.194  0.075
.ASUnd11     0.189  0.040  4.775  0.000  0.189  0.071
.ASUnd12     0.556  0.079  7.068  0.000  0.556  0.196
.ASUnd13     0.486  0.071  6.869  0.000  0.486  0.169
.ARUnd4      1.028  0.149  6.886  0.000  1.028  0.313
.ARUnd7      0.565  0.096  5.906  0.000  0.565  0.201
.ARUnd10     0.887  0.128  6.917  0.000  0.887  0.319
.ARUnd11     1.357  0.185  7.318  0.000  1.357  0.420
.AOUnd2      0.883  0.120  7.357  0.000  0.883  0.394
.AOUnd3      0.791  0.123  6.447  0.000  0.791  0.221
.AOUnd4      0.601  0.114  5.276  0.000  0.601  0.141
.AOUnd5      1.125  0.158  7.131  0.000  1.125  0.329
.RQ1         0.331  0.047  6.991  0.000  0.331  0.353
.RQ4         0.599  0.079  7.555  0.000  0.599  0.509
.RQ5         0.130  0.063  2.067  0.039  0.130  0.067
.RQ6         0.860  0.127  6.760  0.000  0.860  0.318
.SCS1        0.492  0.092  5.321  0.000  0.492  0.195
.SCS3        0.474  0.088  5.406  0.000  0.474  0.200
.SCS5        1.547  0.204  7.572  0.000  1.547  0.577
.SCS6        0.589  0.087  6.727  0.000  0.589  0.330
.EffUnd1     0.457  0.082  5.591  0.000  0.457  0.162
.EffUnd2     1.564  0.209  7.499  0.000  1.564  0.443
.EffUnd3     0.255  0.063  4.014  0.000  0.255  0.099
.EffUnd4     1.998  0.259  7.724  0.000  1.998  0.576
.SexTalk1    0.420  0.068  6.210  0.000  0.420  0.149
.SexTalk2    0.638  0.094  6.811  0.000  0.638  0.205
.SexTalk4    0.406  0.067  6.080  0.000  0.406  0.140
.SexTalk7    0.352  0.064  5.475  0.000  0.352  0.111
.PlanUnd1    0.377  0.193  1.958  0.050  0.377  0.119
.PlanUnd2    0.353  0.198  1.781  0.075  0.353  0.109
.SchUnd1     2.598  0.330  7.882  0.000  2.598  0.772
.IndirVerbal 2.643  0.509  5.188  0.000  0.793  0.793
ASL          2.411  0.325  7.419  0.000  1.000  1.000
.ARUndL      0.924  0.180  5.122  0.000  0.410  0.410
.AOUndL      0.161  0.053  3.062  0.002  0.119  0.119
RQL          0.606  0.112  5.432  0.000  1.000  1.000
SCSL         2.031  0.316  6.432  0.000  1.000  1.000
.EffUncL     0.513  0.099  5.204  0.000  0.217  0.217
.SexTalkL    1.149  0.185  6.216  0.000  0.477  0.477
.EnactmentAss 2.466  0.387  6.376  0.000  0.880  0.880

```

```
> fitMeasures(model_undlikeIndVer_Latent_fit)
```

```

      npar      fmin      chisq      df      pvalue
92.000    3.557    917.607    538.000
baseline.chisq  baseline.df  baseline.pvalue  cfi  tli
4878.627    595.000      0.000    0.911  0.902
      nnfi      rfi      nfi      pnfi      ifi
0.902    0.792    0.812    0.734    0.913
      rmi      logl  unrestricted.logl      aic      bic
0.911   -6745.279   -6286.476    13674.558    13937.660
ntotal      bic2      rmsea      rmsea.ci.lower  rmsea.ci.upper
129.000    13646.695      0.074      0.066      0.082

```

rmsea.ci.level	rmsea.pvalue	rmsea.close.h0	rmsea.notclose.pvalue	rmsea.notclose.h0
0.900	0.000	0.050	0.112	0.080
rmr	rmr_nomean	smr	smr_bentler	smr_bentler_nomean
0.207	0.207	0.072	0.072	0.072
cmr	cmr_nomean	smr_mplus	smr_mplus_nomean	cn_05
0.074	0.074	0.071	0.071	84.375
cn_01	gfi	agfi	pgfi	mfi
87.773	0.727	0.680	0.621	0.230
ecvi				
8.540				

Model Two: Undisclosed Likelihood of to Use Direct-nonverbal Messages Hypothesized Model

lavaan 0.6.15 ended normally after 111 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 143

Number of observations Used Total
 126 326

Model Test User Model:

Test statistic 3758.480
 Degrees of freedom 1748
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DirNV =~						
UndNVD1r1	1.000				1.254	0.707
UndNVD1r2	1.464	0.158	9.277	0.000	1.836	0.946
UndNVD1r3	1.425	0.156	9.142	0.000	1.787	0.861
EnactmentAss =~						
PlanUnd1	1.000				1.661	0.925
PlanUnd2	1.046	0.082	12.815	0.000	1.737	0.958
SchUnd1	0.565	0.091	6.240	0.000	0.939	0.511
SexTalkL =~						
SexTalk1	1.000				1.498	0.890
SexTalk2	1.038	0.070	14.821	0.000	1.555	0.880
SexTalk3	0.820	0.084	9.763	0.000	1.229	0.704
SexTalk4	1.051	0.063	16.646	0.000	1.575	0.923
SexTalk5	0.980	0.083	11.752	0.000	1.468	0.785
SexTalk6	1.143	0.071	16.093	0.000	1.713	0.911
SexTalk7	1.153	0.061	19.039	0.000	1.727	0.968
EffUncl =~						
EffUnd1	1.000				1.601	0.928
EffUnd2	0.892	0.080	11.139	0.000	1.429	0.748
EffUnd3	0.970	0.050	19.329	0.000	1.553	0.949
EffUnd4	0.769	0.087	8.820	0.000	1.232	0.651
AOUndL =~						
AOUnd1	1.000				1.134	0.606
AOUnd2	1.000	0.144	6.924	0.000	1.134	0.750
AOUnd3	1.530	0.194	7.895	0.000	1.735	0.914
AOUnd4	1.731	0.215	8.035	0.000	1.963	0.943
AOUnd5	1.300	0.181	7.195	0.000	1.475	0.792
ARUndL =~						
ARUnd1	1.000				0.437	0.247
ARUnd2	1.305	0.614	2.125	0.034	0.570	0.287
ARUnd3	0.909	0.404	2.249	0.025	0.397	0.327
ARUnd4	3.497	1.270	2.754	0.006	1.528	0.834
ARUnd5	3.406	1.239	2.748	0.006	1.488	0.814
ARUnd6	1.369	0.639	2.144	0.032	0.598	0.292
ARUnd7	3.294	1.194	2.759	0.006	1.439	0.853
ARUnd8	1.568	0.639	2.455	0.014	0.685	0.426
ARUnd9	2.530	0.944	2.679	0.007	1.105	0.655
ARUnd10	3.082	1.122	2.746	0.006	1.346	0.809
ARUnd11	3.314	1.208	2.743	0.006	1.448	0.801
ARUnd12	1.966	0.754	2.607	0.009	0.859	0.554
SCSL =~						
SCS1	1.000				1.418	0.898
SCS2	0.628	0.105	5.965	0.000	0.891	0.498
SCS3	0.954	0.066	14.443	0.000	1.354	0.883
SCS4	0.729	0.096	7.583	0.000	1.033	0.600
SCS5	0.727	0.089	8.204	0.000	1.031	0.635
SCS6	0.768	0.063	12.252	0.000	1.089	0.814
RQL =~						
RQ1	1.000				0.814	0.835
RQ2	0.892	0.088	10.155	0.000	0.727	0.766
RQ3	1.336	0.158	8.477	0.000	1.088	0.673
RQ4	0.994	0.103	9.681	0.000	0.809	0.741
RQ5	1.612	0.115	13.983	0.000	1.313	0.935
RQ6	1.686	0.144	11.699	0.000	1.372	0.840
RQ7	1.419	0.178	7.973	0.000	1.155	0.643
RQ8	1.381	0.193	7.164	0.000	1.125	0.590
ASL =~						

ASUnd1	1.000			1.114	0.637	
ASUnd2	0.982	0.147	6.667	0.000	1.094	0.661
ASUnd3	0.993	0.138	7.194	0.000	1.106	0.726
ASUnd4	1.209	0.157	7.700	0.000	1.347	0.791
ASUnd5	1.352	0.174	7.780	0.000	1.507	0.802
ASUnd6	1.042	0.147	7.104	0.000	1.161	0.715
ASUnd7	1.105	0.149	7.422	0.000	1.231	0.755
ASUnd8	0.909	0.127	7.139	0.000	1.012	0.719
ASUnd9	1.418	0.165	8.587	0.000	1.579	0.916
ASUnd10	1.320	0.155	8.516	0.000	1.471	0.905
ASUnd11	1.362	0.158	8.642	0.000	1.517	0.924
ASUnd12	1.348	0.161	8.377	0.000	1.501	0.885
ASUnd13	1.416	0.164	8.641	0.000	1.578	0.924

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DirNV ~						
ARUndL	-0.832	1.041	-0.799	0.424	-0.290	-0.290
AOUndL	0.345	0.387	0.890	0.373	0.311	0.311
SCSL	0.029	0.164	0.174	0.862	0.032	0.032
SexTalkL	-0.137	0.122	-1.128	0.259	-0.164	-0.164
EffUncl	0.334	0.132	2.528	0.011	0.426	0.426
EnactmentAss	0.069	0.073	0.947	0.344	0.091	0.091
EnactmentAss ~						
EffUncl	-0.377	0.094	-3.999	0.000	-0.364	-0.364
SexTalkL ~						
RQL	-0.035	0.158	-0.220	0.826	-0.019	-0.019
SCSL	0.815	0.104	7.869	0.000	0.772	0.772
EffUncl ~						
SCSL	0.416	0.116	3.588	0.000	0.369	0.369
RQL	0.082	0.166	0.493	0.622	0.042	0.042
AOUndL	0.699	0.173	4.048	0.000	0.495	0.495
ASL	-0.015	0.131	-0.118	0.906	-0.011	-0.011
AOUndL ~						
ASL	0.014	0.078	0.175	0.861	0.014	0.014
ARUndL	2.446	0.942	2.596	0.009	0.942	0.942
ARUndL ~						
ASL	-0.246	0.095	-2.587	0.010	-0.626	-0.626
SCSL	0.148	0.059	2.530	0.011	0.482	0.482
RQL	-0.106	0.055	-1.910	0.056	-0.198	-0.198

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
SCSL ~~						
RQL	0.708	0.136	5.204	0.000	0.613	0.613
ASL	-0.646	0.176	-3.680	0.000	-0.409	-0.409
RQL ~~						
ASL	-0.288	0.095	-3.031	0.002	-0.317	-0.317

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.UndNVDdir1	1.578	0.221	7.132	0.000	1.578	0.501
.UndNVDdir2	0.399	0.204	1.954	0.051	0.399	0.106
.UndNVDdir3	1.119	0.235	4.750	0.000	1.119	0.259
.PlanUnd1	0.463	0.187	2.469	0.014	0.463	0.144
.PlanUnd2	0.272	0.198	1.375	0.169	0.272	0.083
.SchUnd1	2.490	0.321	7.765	0.000	2.490	0.739
.SexTalk1	0.592	0.084	7.084	0.000	0.592	0.209
.SexTalk2	0.704	0.098	7.166	0.000	0.704	0.225
.SexTalk3	1.539	0.199	7.721	0.000	1.539	0.505
.SexTalk4	0.434	0.065	6.630	0.000	0.434	0.149
.SexTalk5	1.338	0.176	7.581	0.000	1.338	0.383
.SexTalk6	0.604	0.088	6.835	0.000	0.604	0.171
.SexTalk7	0.203	0.044	4.630	0.000	0.203	0.064
.EffUnd1	0.410	0.085	4.852	0.000	0.410	0.138
.EffUnd2	1.605	0.217	7.400	0.000	1.605	0.440
.EffUnd3	0.264	0.070	3.761	0.000	0.264	0.099
.EffUnd4	2.064	0.270	7.631	0.000	2.064	0.576
.AOUnd1	2.218	0.287	7.723	0.000	2.218	0.633
.AOUnd2	1.001	0.134	7.459	0.000	1.001	0.438
.AOUnd3	0.589	0.099	5.952	0.000	0.589	0.164
.AOUnd4	0.482	0.099	4.857	0.000	0.482	0.111
.AOUnd5	1.289	0.176	7.307	0.000	1.289	0.372
.ARUnd1	2.928	0.370	7.910	0.000	2.928	0.939
.ARUnd2	3.629	0.459	7.900	0.000	3.629	0.918
.ARUnd3	1.313	0.166	7.888	0.000	1.313	0.893
.ARUnd4	1.025	0.147	6.985	0.000	1.025	0.305
.ARUnd5	1.127	0.158	7.118	0.000	1.127	0.337
.ARUnd6	3.830	0.485	7.899	0.000	3.830	0.915
.ARUnd7	0.774	0.114	6.815	0.000	0.774	0.272
.ARUnd8	2.121	0.270	7.846	0.000	2.121	0.819
.ARUnd9	1.627	0.213	7.627	0.000	1.627	0.571

Model Two: Undisclosed Likelihood of to Use Direct-nonverbal Messages Improved Model

lavaan 0.6.15 ended normally after 71 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 90

Number of observations Used Total
 129 326

Model Test User Model:

Test statistic 868.501
 Degrees of freedom 505
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DirNV =~						
UndNVDdir1	1.000				1.217	0.692
UndNVDdir2	1.451	0.163	8.916	0.000	1.767	0.935
UndNVDdir3	1.443	0.163	8.877	0.000	1.756	0.860
ASL =~						
ASUnd10	1.000				1.553	0.962
ASUnd11	1.013	0.037	27.307	0.000	1.573	0.964
ASUnd12	0.972	0.050	19.459	0.000	1.510	0.896
ASUnd13	0.995	0.048	20.765	0.000	1.545	0.911
ARUndL =~						
ARUnd4	1.000				1.504	0.830
ARUnd7	0.994	0.077	12.820	0.000	1.495	0.891
ARUnd10	0.917	0.081	11.378	0.000	1.380	0.827
ARUnd11	0.911	0.090	10.079	0.000	1.371	0.763
AOUndL =~						
AOUnd2	1.000				1.161	0.776
AOUnd3	1.443	0.127	11.318	0.000	1.675	0.885
AOUnd4	1.651	0.137	12.046	0.000	1.916	0.929
AOUnd5	1.298	0.128	10.177	0.000	1.507	0.815
RQL =~						
RQ1	1.000				0.779	0.804
RQ4	0.977	0.111	8.770	0.000	0.760	0.701
RQ5	1.721	0.131	13.111	0.000	1.340	0.966
RQ6	1.743	0.159	10.938	0.000	1.357	0.826
SCSL =~						
SCS1	1.000				1.426	0.897
SCS3	0.965	0.066	14.729	0.000	1.376	0.894
SCS5	0.747	0.088	8.535	0.000	1.065	0.651
SCS6	0.767	0.062	12.404	0.000	1.093	0.819
EffUncl =~						
EffUnd1	1.000				1.542	0.918
EffUnd2	0.910	0.082	11.091	0.000	1.403	0.747
EffUnd3	0.984	0.052	19.020	0.000	1.517	0.947
EffUnd4	0.784	0.089	8.836	0.000	1.210	0.650
SexTalkL =~						
SexTalk1	1.000				1.552	0.923
SexTalk2	1.015	0.060	16.808	0.000	1.575	0.892
SexTalk4	1.017	0.054	18.903	0.000	1.578	0.927
SexTalk7	1.083	0.054	19.971	0.000	1.681	0.943
EnactmentAss =~						
PlanUnd1	1.000				1.657	0.929
PlanUnd2	1.039	0.085	12.274	0.000	1.722	0.954
SchUnd1	0.531	0.091	5.818	0.000	0.880	0.480

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DirNV ~						
ARUndL	-0.186	0.327	-0.568	0.570	-0.230	-0.230
AOUndL	0.324	0.431	0.752	0.452	0.309	0.309
SCSL	0.062	0.140	0.442	0.658	0.072	0.072
SexTalkL	-0.141	0.164	-0.857	0.392	-0.179	-0.179
EffUncl	0.273	0.178	1.538	0.124	0.346	0.346
EnactmentAss	0.055	0.071	0.775	0.439	0.075	0.075
EnactmentAss ~						
EffUncl	-0.365	0.097	-3.758	0.000	-0.340	-0.340
SexTalkL ~						
RQL	0.123	0.175	0.707	0.480	0.062	0.062

```

SCSL      0.746  0.104  7.153  0.000  0.685  0.685
EffUncL ~
SCSL      -0.142  0.109 -1.302  0.193 -0.131 -0.131
RQL       0.069  0.134  0.512  0.609  0.035  0.035
AOUndL    0.559  0.114  4.892  0.000  0.421  0.421
ASL       -0.118  0.068 -1.739  0.082 -0.119 -0.119
SexTalkL  0.655  0.083  7.895  0.000  0.660  0.660
AOUndL ~
ASL       -0.029  0.048 -0.594  0.552 -0.039 -0.039
ARUndL    0.705  0.081  8.654  0.000  0.913  0.913
ARUndL ~
ASL       -0.526  0.074 -7.115  0.000 -0.543 -0.543
SCSL      0.552  0.099  5.555  0.000  0.523  0.523
RQL       -0.368  0.167 -2.212  0.027 -0.191 -0.191

```

Covariances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
ASL ~~~
RQL      -0.312  0.116 -2.688  0.007 -0.258 -0.258
SCSL     -0.617  0.215 -2.876  0.004 -0.279 -0.279
RQL ~~~
SCSL      0.661  0.130  5.081  0.000  0.595  0.595

```

Variances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
.UndNVDdir1  1.610  0.223  7.215  0.000  1.610  0.521
.UndNVDdir2  0.446  0.206  2.165  0.030  0.446  0.125
.UndNVDdir3  1.082  0.239  4.535  0.000  1.082  0.260
.ASUnd10     0.194  0.039  4.919  0.000  0.194  0.075
.ASUnd11     0.189  0.040  4.767  0.000  0.189  0.071
.ASUnd12     0.557  0.079  7.069  0.000  0.557  0.196
.ASUnd13     0.486  0.071  6.870  0.000  0.486  0.169
.ARUnd4      1.021  0.149  6.834  0.000  1.021  0.311
.ARUnd7      0.577  0.098  5.898  0.000  0.577  0.205
.ARUnd10     0.879  0.128  6.861  0.000  0.879  0.316
.ARUnd11     1.353  0.186  7.289  0.000  1.353  0.418
.AOUnd2      0.892  0.121  7.357  0.000  0.892  0.398
.AOUnd3      0.777  0.122  6.378  0.000  0.777  0.217
.AOUnd4      0.586  0.114  5.154  0.000  0.586  0.138
.AOUnd5      1.147  0.161  7.142  0.000  1.147  0.335
.RQ1         0.331  0.047  6.992  0.000  0.331  0.353
.RQ4         0.600  0.079  7.556  0.000  0.600  0.509
.RQ5         0.130  0.063  2.065  0.039  0.130  0.067
.RQ6         0.860  0.127  6.760  0.000  0.860  0.318
.SCS1        0.491  0.092  5.314  0.000  0.491  0.195
.SCS3        0.474  0.088  5.404  0.000  0.474  0.200
.SCS5        1.545  0.204  7.570  0.000  1.545  0.577
.SCS6        0.589  0.088  6.727  0.000  0.589  0.330
.EffUnd1     0.444  0.080  5.520  0.000  0.444  0.157
.EffUnd2     1.562  0.208  7.498  0.000  1.562  0.443
.EffUnd3     0.262  0.064  4.127  0.000  0.262  0.102
.EffUnd4     2.003  0.259  7.725  0.000  2.003  0.578
.SexTalk1    0.421  0.068  6.204  0.000  0.421  0.149
.SexTalk2    0.636  0.094  6.802  0.000  0.636  0.204
.SexTalk4    0.406  0.067  6.069  0.000  0.406  0.140
.SexTalk7    0.353  0.065  5.474  0.000  0.353  0.111
.PlanUnd1    0.434  0.197  2.203  0.028  0.434  0.137
.PlanUnd2    0.291  0.208  1.399  0.162  0.291  0.089
.SchUnd1     2.593  0.329  7.883  0.000  2.593  0.770
.DirNV       1.311  0.307  4.276  0.000  0.885  0.885
ASL          2.411  0.325  7.419  0.000  1.000  1.000
.ARUndL      0.928  0.182  5.104  0.000  0.410  0.410
.AOUndL      0.162  0.052  3.086  0.002  0.120  0.120
RQL          0.606  0.112  5.432  0.000  1.000  1.000
SCSL        2.032  0.316  6.434  0.000  1.000  1.000
.EffUncL     0.522  0.100  5.233  0.000  0.219  0.219
.SexTalkL    1.149  0.185  6.219  0.000  0.477  0.477
.EnactmentAss 2.428  0.387  6.273  0.000  0.885  0.885

```

> fitMeasures(model_undlikeDirNV_Latent_fit)

```

npar      90.000      fmin      3.366      chisq      868.501      df      505.000      pvalue      0.000
baseline.chisq 4810.566      baseline.df 561.000      baseline.pvalue 0.000      cfi      0.914      tli      0.905
nnfi      0.905      rfi      0.799      nfi      0.819      pnfi     0.738      ifi      0.916
rmi      0.914      logl      -6487.020      unrestricted.logl -6052.769      aic      13154.040      bic      13411.423
ntotal    129.000      bic2      13126.783      rmsea     0.075      rmsea.ci.lower 0.066      rmsea.ci.upper 0.083
rmsea.ci.level 0.900      rmsea.pvalue 0.000      rmsea.close.h0 0.050      rmsea.notclose.pvalue 0.151      rmsea.notclose.h0 0.080

```

rnr	rnr_nomean	srmr	srmr_bentler	srmr_bentler_nomean	
0.212	0.212	0.074	0.074	0.074	
cmr	cmr_nomean	srmr_mplus	srmr_mplus_nomean		cn_05
0.076	0.076	0.074	0.074	83.938	
cn_01	gfi	agfi	pgfi	mfi	
87.425	0.724	0.674	0.614	0.244	
ecvi					
8.128					

Model Two: Undisclosed Likelihood of to Use Indirect-nonverbal Messages Hypothesized Model

lavaan 0.6.15 ended normally after 108 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 143

Number of observations Used Total
 126 326

Model Test User Model:

Test statistic 3757.856
 Degrees of freedom 1748
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
IndNV =~						
UndNVInd1	1.000				1.204	0.684
UndNVInd2	1.330	0.171	7.791	0.000	1.602	0.854
UndNVInd3	1.299	0.167	7.790	0.000	1.565	0.846
EnactmentAss =~						
PlanUnd1	1.000				1.675	0.933
PlanUnd2	1.029	0.080	12.927	0.000	1.723	0.950
SchUnd1	0.558	0.090	6.193	0.000	0.935	0.509
SexTalkL =~						
SexTalk1	1.000				1.499	0.890
SexTalk2	1.038	0.070	14.836	0.000	1.555	0.880
SexTalk3	0.819	0.084	9.755	0.000	1.228	0.703
SexTalk4	1.051	0.063	16.666	0.000	1.576	0.923
SexTalk5	0.979	0.083	11.750	0.000	1.468	0.785
SexTalk6	1.143	0.071	16.113	0.000	1.713	0.911
SexTalk7	1.152	0.060	19.047	0.000	1.726	0.967
EffUndL =~						
EffUnd1	1.000				1.599	0.927
EffUnd2	0.893	0.080	11.100	0.000	1.428	0.748
EffUnd3	0.974	0.051	19.263	0.000	1.556	0.951
EffUnd4	0.770	0.087	8.805	0.000	1.231	0.651
AOUndL =~						
AOUnd1	1.000				1.133	0.605
AOUnd2	1.001	0.145	6.919	0.000	1.134	0.750
AOUnd3	1.530	0.194	7.881	0.000	1.733	0.914
AOUnd4	1.734	0.216	8.029	0.000	1.964	0.944
AOUnd5	1.302	0.181	7.189	0.000	1.475	0.793
ARUndL =~						
ARUnd1	1.000				0.439	0.249
ARUnd2	1.302	0.610	2.135	0.033	0.572	0.288
ARUnd3	0.909	0.402	2.262	0.024	0.399	0.329
ARUnd4	3.475	1.255	2.769	0.006	1.526	0.833
ARUnd5	3.383	1.225	2.763	0.006	1.486	0.813
ARUnd6	1.364	0.634	2.152	0.031	0.599	0.293
ARUnd7	3.280	1.182	2.775	0.006	1.440	0.854
ARUnd8	1.560	0.632	2.466	0.014	0.685	0.426
ARUnd9	2.513	0.933	2.693	0.007	1.104	0.654
ARUnd10	3.069	1.111	2.762	0.006	1.348	0.810
ARUnd11	3.295	1.195	2.758	0.006	1.447	0.801
ARUnd12	1.963	0.749	2.622	0.009	0.862	0.556
SCSL =~						
SCS1	1.000				1.418	0.897
SCS2	0.629	0.105	5.968	0.000	0.891	0.498
SCS3	0.955	0.066	14.441	0.000	1.354	0.883
SCS4	0.729	0.096	7.580	0.000	1.033	0.600
SCS5	0.727	0.089	8.196	0.000	1.031	0.635
SCS6	0.768	0.063	12.252	0.000	1.089	0.814
RQL =~						
RQ1	1.000				0.814	0.835
RQ2	0.892	0.088	10.156	0.000	0.727	0.766
RQ3	1.336	0.158	8.478	0.000	1.088	0.673
RQ4	0.994	0.103	9.681	0.000	0.809	0.741
RQ5	1.612	0.115	13.983	0.000	1.312	0.935
RQ6	1.686	0.144	11.698	0.000	1.372	0.840
RQ7	1.419	0.178	7.973	0.000	1.155	0.643

RQ8	1.381	0.193	7.164	0.000	1.125	0.590
ASL =~						
ASUnd1	1.000			1.114	0.637	
ASUnd2	0.982	0.147	6.666	0.000	1.094	0.661
ASUnd3	0.993	0.138	7.194	0.000	1.106	0.726
ASUnd4	1.209	0.157	7.699	0.000	1.347	0.791
ASUnd5	1.352	0.174	7.779	0.000	1.507	0.802
ASUnd6	1.042	0.147	7.104	0.000	1.161	0.715
ASUnd7	1.105	0.149	7.422	0.000	1.231	0.755
ASUnd8	0.909	0.127	7.139	0.000	1.012	0.719
ASUnd9	1.418	0.165	8.588	0.000	1.580	0.916
ASUnd10	1.320	0.155	8.517	0.000	1.471	0.905
ASUnd11	1.362	0.158	8.642	0.000	1.517	0.924
ASUnd12	1.348	0.161	8.378	0.000	1.501	0.885
ASUnd13	1.416	0.164	8.641	0.000	1.578	0.924

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
IndNV ~						
ARUndL	-0.774	1.058	-0.732	0.464	-0.282	-0.282
AOUndL	0.433	0.400	1.080	0.280	0.407	0.407
SCSL	-0.013	0.169	-0.079	0.937	-0.016	-0.016
SexTalkL	-0.050	0.125	-0.402	0.687	-0.063	-0.063
EffUncl	0.164	0.133	1.233	0.217	0.218	0.218
EnactmentAss	0.103	0.075	1.365	0.172	0.143	0.143
EnactmentAss ~						
EffUncl	-0.386	0.095	-4.072	0.000	-0.369	-0.369
SexTalkL ~						
RQL	-0.037	0.158	-0.233	0.816	-0.020	-0.020
SCSL	0.817	0.104	7.871	0.000	0.773	0.773
EffUncl ~						
SCSL	0.415	0.116	3.586	0.000	0.368	0.368
RQL	0.084	0.166	0.509	0.611	0.043	0.043
AOUndL	0.693	0.172	4.025	0.000	0.491	0.491
ASL	-0.022	0.131	-0.165	0.869	-0.015	-0.015
AOUndL ~						
ASL	0.009	0.078	0.116	0.908	0.009	0.009
ARUndL	2.420	0.928	2.608	0.009	0.938	0.938
ARUndL ~						
ASL	-0.246	0.095	-2.599	0.009	-0.624	-0.624
SCSL	0.150	0.059	2.541	0.011	0.483	0.483
RQL	-0.107	0.056	-1.914	0.056	-0.198	-0.198

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
SCSL ~~						
RQL	0.709	0.136	5.207	0.000	0.614	0.614
ASL	-0.647	0.176	-3.682	0.000	-0.409	-0.409
RQL ~~						
ASL	-0.288	0.095	-3.030	0.002	-0.317	-0.317

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.UndNVInd1	1.647	0.244	6.738	0.000	1.647	0.532
.UndNVInd2	0.955	0.252	3.788	0.000	0.955	0.271
.UndNVInd3	0.971	0.245	3.971	0.000	0.971	0.284
.PlanUnd1	0.418	0.187	2.242	0.025	0.418	0.130
.PlanUnd2	0.320	0.194	1.651	0.099	0.320	0.097
.SchUnd1	2.497	0.322	7.764	0.000	2.497	0.741
.SexTalk1	0.590	0.083	7.079	0.000	0.590	0.208
.SexTalk2	0.703	0.098	7.163	0.000	0.703	0.225
.SexTalk3	1.541	0.200	7.721	0.000	1.541	0.505
.SexTalk4	0.433	0.065	6.625	0.000	0.433	0.149
.SexTalk5	1.339	0.177	7.580	0.000	1.339	0.383
.SexTalk6	0.603	0.088	6.830	0.000	0.603	0.171
.SexTalk7	0.204	0.044	4.644	0.000	0.204	0.064
.EffUnd1	0.419	0.086	4.877	0.000	0.419	0.141
.EffUnd2	1.609	0.217	7.402	0.000	1.609	0.441
.EffUnd3	0.255	0.071	3.611	0.000	0.255	0.095
.EffUnd4	2.065	0.271	7.631	0.000	2.065	0.577
.AOUnd1	2.220	0.287	7.725	0.000	2.220	0.634
.AOUnd2	1.000	0.134	7.461	0.000	1.000	0.437
.AOUnd3	0.595	0.099	5.981	0.000	0.595	0.165
.AOUnd4	0.475	0.099	4.822	0.000	0.475	0.110
.AOUnd5	1.287	0.176	7.308	0.000	1.287	0.372
.ARUnd1	2.926	0.370	7.910	0.000	2.926	0.938
.ARUnd2	3.626	0.459	7.900	0.000	3.626	0.917
.ARUnd3	1.311	0.166	7.887	0.000	1.311	0.892
.ARUnd4	1.029	0.147	6.987	0.000	1.029	0.306
.ARUnd5	1.132	0.159	7.121	0.000	1.132	0.339
.ARUnd6	3.829	0.485	7.899	0.000	3.829	0.914
.ARUnd7	0.769	0.113	6.802	0.000	0.769	0.270

```

.ARUnd8      2.121  0.270  7.846  0.000  2.121  0.819
.ARUnd9      1.631  0.214  7.627  0.000  1.631  0.572
.ARUnd10     0.951  0.133  7.138  0.000  0.951  0.344
.ARUnd11     1.174  0.163  7.191  0.000  1.174  0.359
.ARUnd12     1.664  0.215  7.752  0.000  1.664  0.691
.SCS1        0.487  0.088  5.550  0.000  0.487  0.195
.SCS2        2.411  0.311  7.752  0.000  2.411  0.752
.SCS3        0.517  0.088  5.885  0.000  0.517  0.220
.SCS4        1.897  0.249  7.621  0.000  1.897  0.640
.SCS5        1.573  0.208  7.557  0.000  1.573  0.597
.SCS6        0.603  0.089  6.815  0.000  0.603  0.337
.RQ1         0.287  0.042  6.817  0.000  0.287  0.302
.RQ2         0.371  0.051  7.258  0.000  0.371  0.413
.RQ3         1.427  0.189  7.545  0.000  1.427  0.547
.RQ4         0.536  0.073  7.356  0.000  0.536  0.450
.RQ5         0.248  0.054  4.617  0.000  0.248  0.126
.RQ6         0.787  0.116  6.774  0.000  0.787  0.295
.RQ7         1.898  0.250  7.605  0.000  1.898  0.587
.RQ8         2.364  0.308  7.685  0.000  2.364  0.651
.ASUnd1      1.820  0.234  7.786  0.000  1.820  0.595
.ASUnd2      1.541  0.198  7.765  0.000  1.541  0.563
.ASUnd3      1.100  0.143  7.691  0.000  1.100  0.473
.ASUnd4      1.085  0.143  7.566  0.000  1.085  0.374
.ASUnd5      1.261  0.167  7.537  0.000  1.261  0.357
.ASUnd6      1.293  0.168  7.706  0.000  1.293  0.489
.ASUnd7      1.146  0.150  7.644  0.000  1.146  0.430
.ASUnd8      0.958  0.124  7.700  0.000  0.958  0.483
.ASUnd9      0.478  0.071  6.772  0.000  0.478  0.161
.ASUnd10     0.475  0.069  6.921  0.000  0.475  0.180
.ASUnd11     0.393  0.059  6.629  0.000  0.393  0.146
.ASUnd12     0.623  0.087  7.131  0.000  0.623  0.217
.ASUnd13     0.426  0.064  6.631  0.000  0.426  0.146
.IndNV       1.318  0.326  4.041  0.000  0.909  0.909
.EnactmentAss 2.423  0.384  6.309  0.000  0.864  0.864
.SexTalkL    0.947  0.164  5.776  0.000  0.422  0.422
.EffUncL     0.937  0.155  6.028  0.000  0.367  0.367
.AOUndL      0.170  0.058  2.917  0.004  0.132  0.132
.ARUndL      0.055  0.040  1.369  0.171  0.287  0.287
SCSL         2.010  0.315  6.385  0.000  1.000  1.000
RQL          0.663  0.116  5.708  0.000  1.000  1.000
ASL          1.241  0.313  3.960  0.000  1.000  1.000

```

```
> fitMeasures(model_undlikeIndNV_Latent_fit)
```

```

npar      fmin      chisq      df      pvalue
143.000    14.912    3757.856    1748.000    0.000
baseline.chisq  baseline.df  baseline.pvalue  cfi      tli
9479.337    1830.000    0.000      0.737    0.725
nnfi      rfi      nfi      pnfi      ifi
0.725     0.585     0.604     0.577     0.740
rmi      logl  unrestricted.logl      aic      bic
0.737    -11984.352    -10105.424    24254.705    24660.293
ntotal   bic2      rmsea  rmsea.ci.lower  rmsea.ci.upper
126.000  24208.084    0.096    0.091    0.100
rmsea.ci.level  rmsea.pvalue  rmsea.close.h0  rmsea.notclose.pvalue  rmsea.notclose.h0
0.900          0.000          0.050          1.000          0.080
rmr      rmr_omean      smmr      smmr_bentler  smmr_bentler_omean
0.308     0.308          0.103          0.103          0.103
cmr      cmr_omean      smmr_mplus  smmr_mplus_omean      cn_05
0.105     0.105          0.103          0.103          62.909
cn_01     gfi      agfi      pgfi      mfi
64.320    0.514          0.474          0.475          0.000
ecvi
32.094

```

Model Two: Undisclosed Likelihood of to Use Indirect-nonverbal Messages Improved Model

lavaan 0.6.15 ended normally after 70 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 90

Number of observations Used Total
 129 326

Model Test User Model:

Test statistic 844.725
 Degrees of freedom 505
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
IndNV =~						
UndNVInd1	1.000				1.143	0.655
UndNVInd2	1.406	0.190	7.394	0.000	1.607	0.866
UndNVInd3	1.350	0.182	7.420	0.000	1.542	0.833
ASL =~						
ASUnd10	1.000				1.553	0.962
ASUnd11	1.013	0.037	27.306	0.000	1.573	0.964
ASUnd12	0.972	0.050	19.460	0.000	1.510	0.896
ASUnd13	0.995	0.048	20.768	0.000	1.545	0.911
ARUndL =~						
ARUnd4	1.000				1.503	0.829
ARUnd7	0.995	0.078	12.821	0.000	1.496	0.892
ARUnd10	0.919	0.081	11.381	0.000	1.381	0.828
ARUnd11	0.912	0.091	10.059	0.000	1.370	0.762
AOUndL =~						
AOUnd2	1.000				1.161	0.776
AOUnd3	1.442	0.128	11.307	0.000	1.674	0.884
AOUnd4	1.652	0.137	12.056	0.000	1.917	0.929
AOUnd5	1.299	0.128	10.179	0.000	1.507	0.815
RQL =~						
RQ1	1.000				0.779	0.804
RQ4	0.977	0.111	8.771	0.000	0.760	0.701
RQ5	1.721	0.131	13.111	0.000	1.340	0.966
RQ6	1.743	0.159	10.939	0.000	1.357	0.826
SCSL =~						
SCS1	1.000				1.425	0.897
SCS3	0.965	0.066	14.724	0.000	1.376	0.894
SCS5	0.747	0.088	8.531	0.000	1.064	0.650
SCS6	0.767	0.062	12.408	0.000	1.094	0.819
EffUncl =~						
EffUnd1	1.000				1.541	0.917
EffUnd2	0.910	0.082	11.066	0.000	1.402	0.746
EffUnd3	0.986	0.052	18.980	0.000	1.519	0.949
EffUnd4	0.785	0.089	8.827	0.000	1.210	0.650
SexTalkL =~						
SexTalk1	1.000				1.553	0.923
SexTalk2	1.015	0.060	16.826	0.000	1.576	0.892
SexTalk4	1.016	0.054	18.921	0.000	1.578	0.927
SexTalk7	1.082	0.054	19.971	0.000	1.680	0.942
EnactmentAss =~						
PlanUnd1	1.000				1.670	0.936
PlanUnd2	1.023	0.082	12.404	0.000	1.708	0.947
SchUnd1	0.525	0.091	5.772	0.000	0.876	0.478

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
IndNV ~						
ARUndL	-0.170	0.321	-0.531	0.596	-0.224	-0.224
AOUndL	0.409	0.425	0.963	0.335	0.415	0.415
SCSL	0.012	0.137	0.087	0.931	0.015	0.015
SexTalkL	-0.043	0.161	-0.265	0.791	-0.058	-0.058
EffUncl	0.096	0.173	0.556	0.578	0.130	0.130
EnactmentAss	0.093	0.070	1.320	0.187	0.136	0.136
EnactmentAss ~						
EffUncl	-0.374	0.098	-3.826	0.000	-0.345	-0.345
SexTalkL ~						
RQL	0.121	0.175	0.693	0.488	0.061	0.061

```

SCSL      0.747  0.104  7.154  0.000  0.685  0.685
EffUncL ~
SCSL      -0.143  0.108  -1.321  0.187  -0.133  -0.133
RQL       0.072  0.134  0.539  0.590  0.036  0.036
AOUndL    0.554  0.114  4.862  0.000  0.417  0.417
ASL       -0.122  0.068  -1.812  0.070  -0.123  -0.123
SexTalkL  0.656  0.083  7.916  0.000  0.661  0.661
AOUndL ~
ASL       -0.033  0.048  -0.685  0.493  -0.044  -0.044
ARUndL    0.702  0.081  8.648  0.000  0.909  0.909
ARUndL ~
ASL       -0.523  0.074  -7.065  0.000  -0.540  -0.540
SCSL      0.552  0.100  5.540  0.000  0.523  0.523
RQL       -0.368  0.167  -2.204  0.027  -0.191  -0.191

```

Covariances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
ASL ~~~
RQL      -0.312  0.116  -2.687  0.007  -0.258  -0.258
SCSL     -0.619  0.215  -2.882  0.004  -0.280  -0.280
RQL ~~~
SCSL     0.661  0.130  5.084  0.000  0.596  0.596

```

Variances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
.UndNVInd1 1.740  0.249  6.976  0.000  1.740  0.571
.UndNVInd2 0.862  0.259  3.323  0.001  0.862  0.250
.UndNVInd3 1.052  0.254  4.139  0.000  1.052  0.307
.ASUnd10   0.194  0.039  4.917  0.000  0.194  0.075
.ASUnd11   0.189  0.040  4.770  0.000  0.189  0.071
.ASUnd12   0.557  0.079  7.069  0.000  0.557  0.196
.ASUnd13   0.486  0.071  6.869  0.000  0.486  0.169
.ARUnd4    1.025  0.150  6.838  0.000  1.025  0.312
.ARUnd7    0.572  0.097  5.872  0.000  0.572  0.204
.ARUnd10   0.875  0.128  6.851  0.000  0.875  0.314
.ARUnd11   1.355  0.186  7.289  0.000  1.355  0.419
.AOUnd2    0.892  0.121  7.360  0.000  0.892  0.398
.AOUnd3    0.781  0.122  6.395  0.000  0.781  0.218
.AOUnd4    0.581  0.113  5.138  0.000  0.581  0.137
.AOUnd5    1.146  0.160  7.144  0.000  1.146  0.335
.RQ1       0.331  0.047  6.991  0.000  0.331  0.353
.RQ4       0.600  0.079  7.555  0.000  0.600  0.509
.RQ5       0.130  0.063  2.067  0.039  0.130  0.067
.RQ6       0.859  0.127  6.760  0.000  0.859  0.318
.SCS1     0.492  0.092  5.317  0.000  0.492  0.195
.SCS3     0.474  0.088  5.405  0.000  0.474  0.200
.SCS5     1.546  0.204  7.571  0.000  1.546  0.577
.SCS6     0.588  0.087  6.725  0.000  0.588  0.330
.EffUnd1   0.450  0.081  5.547  0.000  0.450  0.159
.EffUnd2   1.565  0.209  7.499  0.000  1.565  0.443
.EffUnd3   0.257  0.064  4.049  0.000  0.257  0.100
.EffUnd4   2.003  0.259  7.725  0.000  2.003  0.578
.SexTalk1  0.419  0.068  6.194  0.000  0.419  0.148
.SexTalk2  0.636  0.094  6.800  0.000  0.636  0.204
.SexTalk4  0.406  0.067  6.068  0.000  0.406  0.140
.SexTalk7  0.355  0.065  5.488  0.000  0.355  0.112
.PlanUnd1  0.391  0.196  1.996  0.046  0.391  0.123
.PlanUnd2  0.337  0.203  1.659  0.097  0.337  0.104
.SchUnd1   2.599  0.330  7.883  0.000  2.599  0.772
.IndNV     1.194  0.309  3.860  0.000  0.915  0.915
ASL        2.411  0.325  7.419  0.000  1.000  1.000
.ARUndL    0.933  0.183  5.104  0.000  0.413  0.413
.AOUndL    0.163  0.052  3.104  0.002  0.121  0.121
RQL        0.606  0.112  5.432  0.000  1.000  1.000
SCSL       2.032  0.316  6.432  0.000  1.000  1.000
.EffUncL   0.519  0.099  5.225  0.000  0.218  0.218
.SexTalkL  1.150  0.185  6.220  0.000  0.477  0.477
.EnactmentAss 2.456  0.388  6.335  0.000  0.881  0.881

```

> fitMeasures(model_undlikeIndNV_Latent_fit)

```

npar      90.000      fmin      3.274      chisq      844.725      df      505.000      pvalue      0.000
baseline.chisq 4726.127 baseline.df 561.000 baseline.pvalue 0.000 cfi 0.918 tli 0.909
nnfi      0.909      rfi      0.801      nfi      0.821      pnfi     0.739      ifi     0.920
rmi      0.918      logl     -6501.276 unrestricted.logl -6078.914 aic 13182.553 bic 13439.936
ntotal    129.000      bic2     13155.296      rmsea     0.072      rmsea.ci.lower 0.064      rmsea.ci.upper 0.081
rmsea.ci.level 0.900      rmsea.pvalue 0.000      rmsea.close.h0 0.050      rmsea.notclose.pvalue 0.065      rmsea.notclose.h0 0.080

```

rnr	rnr_nomean	srmr	srmr_bentler	srmr_bentler_nomean	
0.197	0.197	0.071	0.071	0.071	
crmr	crmr_nomean	srmr_mplus	srmr_mplus_nomean		cn_05
0.073	0.073	0.071	0.071	86.273	
cn_01	gfi	agfi	pgfi	mfi	
89.857	0.732	0.684	0.621	0.268	
ecvi					
7.944					

Model Three: Disclosed Use of Direct-verbal Messages Hypothesized Model

lavaan 0.6.15 ended normally after 69 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 141

Number of observations Used Total
 190 326

Model Test User Model:

Test statistic 3856.382
 Degrees of freedom 1689
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisDirVL =~						
DisVerbDir1	1.000				1.150	0.693
DisVerbDir2	1.145	0.166	6.894	0.000	1.316	0.756
DisVerbDir3	1.031	0.156	6.610	0.000	1.185	0.625
EnactmentAss =~						
PlanDis1	1.000				1.582	0.910
PlanDis2	0.887	0.129	6.875	0.000	1.404	0.752
SchDis1	0.462	0.088	5.255	0.000	0.731	0.447
SexTalkL =~						
SexTalk1	1.000				1.155	0.881
SexTalk2	1.170	0.064	18.149	0.000	1.352	0.894
SexTalk3	1.028	0.092	11.179	0.000	1.188	0.681
SexTalk4	1.054	0.064	16.588	0.000	1.217	0.857
SexTalk5	0.918	0.088	10.456	0.000	1.061	0.650
SexTalk6	1.067	0.072	14.791	0.000	1.233	0.808
SexTalk7	1.171	0.058	20.095	0.000	1.352	0.934
EffDisL =~						
EffDis1	1.000				1.041	0.820
EffDis2	1.332	0.108	12.295	0.000	1.387	0.800
EffDis3	0.764	0.073	10.430	0.000	0.795	0.705
EffDis4	1.196	0.119	10.039	0.000	1.245	0.684
AODisL =~						
AODis1	1.000				1.061	0.609
AODis3	0.775	0.093	8.323	0.000	0.822	0.755
AODis4	1.249	0.137	9.144	0.000	1.325	0.875
AODis5	0.649	0.094	6.889	0.000	0.688	0.587
ARDisL =~						
ARDis1	1.000				1.278	0.738
ARDis2	0.959	0.108	8.856	0.000	1.226	0.656
ARDis3	0.598	0.080	7.487	0.000	0.764	0.559
ARDis4	1.001	0.093	10.732	0.000	1.279	0.788
ARDis5	0.862	0.090	9.525	0.000	1.101	0.704
ARDis6	1.122	0.107	10.444	0.000	1.434	0.768
ARDis7	0.660	0.073	9.004	0.000	0.844	0.667
ARDis8	0.490	0.097	5.051	0.000	0.626	0.381
ARDis9	0.797	0.106	7.514	0.000	1.019	0.561
ARDis10	0.428	0.077	5.544	0.000	0.547	0.417
ARDis11	0.643	0.088	7.265	0.000	0.821	0.543
ARDis12	0.178	0.095	1.878	0.060	0.228	0.143
SCSL =~						
SCS1	1.000				1.584	0.947
SCS2	0.527	0.079	6.701	0.000	0.835	0.454
SCS3	0.962	0.050	19.340	0.000	1.524	0.869
SCS4	0.685	0.075	9.114	0.000	1.085	0.576
SCS5	0.792	0.064	12.341	0.000	1.256	0.701
SCS6	0.628	0.043	14.496	0.000	0.995	0.765
RQL =~						
RQ1	1.000				0.737	0.789
RQ2	0.677	0.063	10.750	0.000	0.499	0.717
RQ3	1.266	0.147	8.623	0.000	0.934	0.596
RQ4	1.017	0.082	12.393	0.000	0.750	0.801
RQ5	1.799	0.116	15.491	0.000	1.326	0.942
RQ6	1.964	0.144	13.669	0.000	1.448	0.861
RQ7	1.720	0.147	11.683	0.000	1.268	0.765
RQ8	1.743	0.185	9.410	0.000	1.285	0.642
ASDisL =~						
ASDis1	1.000				1.181	0.787

ASDis2	0.949	0.078	12.168	0.000	1.121	0.786
ASDis3	0.788	0.071	11.126	0.000	0.930	0.733
ASDis4	1.057	0.082	12.881	0.000	1.248	0.821
ASDis5	1.003	0.082	12.164	0.000	1.185	0.786
ASDis6	0.632	0.066	9.526	0.000	0.746	0.645
ASDis7	0.783	0.069	11.316	0.000	0.925	0.743
ASDis8	0.407	0.048	8.459	0.000	0.481	0.583
ASDis9	0.984	0.068	14.522	0.000	1.163	0.895
ASDis10	0.874	0.060	14.623	0.000	1.032	0.899
ASDis11	1.000	0.070	14.342	0.000	1.181	0.887
ASDis12	1.040	0.075	13.875	0.000	1.228	0.866
ASDis13	1.125	0.085	13.301	0.000	1.328	0.840

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisDirVL ~						
ARDisL	-0.359	0.151	-2.375	0.018	-0.399	-0.399
AODisL	0.411	0.277	1.486	0.137	0.380	0.380
SCSL	0.007	0.131	0.056	0.955	0.010	0.010
SexTalkL	0.041	0.150	0.275	0.783	0.041	0.041
EffDisL	0.334	0.275	1.213	0.225	0.302	0.302
EnactmentAss	-0.010	0.065	-0.149	0.881	-0.013	-0.013
EnactmentAss ~						
EffDisL	-0.400	0.124	-3.221	0.001	-0.263	-0.263
SexTalkL ~						
RQL	0.426	0.134	3.180	0.001	0.272	0.272
SCSL	0.432	0.064	6.724	0.000	0.592	0.592
EffDisL ~						
SCSL	0.110	0.058	1.888	0.059	0.167	0.167
RQL	0.419	0.126	3.312	0.001	0.297	0.297
AODisL	0.757	0.127	5.975	0.000	0.772	0.772
ASDisL	0.124	0.085	1.455	0.146	0.140	0.140
AODisL ~						
ASDisL	-0.430	0.077	-5.586	0.000	-0.478	-0.478
ARDisL	0.396	0.073	5.408	0.000	0.477	0.477
ARDisL ~						
ASDisL	-0.627	0.089	-7.037	0.000	-0.580	-0.580
SCSL	0.276	0.090	3.057	0.002	0.342	0.342
RQL	-0.283	0.192	-1.471	0.141	-0.163	-0.163

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
SCSL ~ ~						
RQL	0.918	0.124	7.405	0.000	0.786	0.786
ASDisL	-0.578	0.152	-3.795	0.000	-0.309	-0.309
RQL ~ ~						
ASDisL	-0.293	0.073	-4.004	0.000	-0.336	-0.336

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.DisVerbDir1	1.429	0.221	6.466	0.000	1.429	0.520
.DisVerbDir2	1.297	0.251	5.170	0.000	1.297	0.428
.DisVerbDir3	2.185	0.289	7.563	0.000	2.185	0.609
.PlanDis1	0.519	0.329	1.577	0.115	0.519	0.172
.PlanDis2	1.516	0.300	5.060	0.000	1.516	0.435
.SchDis1	2.144	0.232	9.230	0.000	2.144	0.801
.SexTalk1	0.386	0.047	8.208	0.000	0.386	0.224
.SexTalk2	0.459	0.058	7.970	0.000	0.459	0.201
.SexTalk3	1.632	0.174	9.368	0.000	1.632	0.536
.SexTalk4	0.535	0.063	8.519	0.000	0.535	0.265
.SexTalk5	1.535	0.163	9.426	0.000	1.535	0.577
.SexTalk6	0.808	0.091	8.918	0.000	0.808	0.347
.SexTalk7	0.268	0.040	6.705	0.000	0.268	0.128
.EffDis1	0.528	0.071	7.396	0.000	0.528	0.328
.EffDis2	1.085	0.140	7.730	0.000	1.085	0.361
.EffDis3	0.641	0.074	8.647	0.000	0.641	0.503
.EffDis4	1.767	0.201	8.771	0.000	1.767	0.533
.AODis1	1.905	0.208	9.161	0.000	1.905	0.629
.AODis3	0.509	0.061	8.405	0.000	0.509	0.430
.AODis4	0.538	0.086	6.277	0.000	0.538	0.235
.AODis5	0.903	0.098	9.227	0.000	0.903	0.656
.ARDis1	1.366	0.159	8.571	0.000	1.366	0.455
.ARDis2	1.983	0.220	9.004	0.000	1.983	0.569
.ARDis3	1.284	0.138	9.302	0.000	1.284	0.688
.ARDis4	1.001	0.123	8.138	0.000	1.001	0.380
.ARDis5	1.237	0.141	8.784	0.000	1.237	0.505
.ARDis6	1.433	0.172	8.335	0.000	1.433	0.411
.ARDis7	0.889	0.099	8.961	0.000	0.889	0.555
.ARDis8	2.306	0.241	9.581	0.000	2.306	0.855
.ARDis9	2.261	0.243	9.298	0.000	2.261	0.685
.ARDis10	1.417	0.148	9.541	0.000	1.417	0.826
.ARDis11	1.614	0.173	9.338	0.000	1.614	0.705

.ARDis12	2.492	0.256	9.727	0.000	2.492	0.980
.SCS1	0.286	0.061	4.719	0.000	0.286	0.102
.SCS2	2.688	0.280	9.603	0.000	2.688	0.794
.SCS3	0.756	0.096	7.881	0.000	0.756	0.246
.SCS4	2.376	0.251	9.470	0.000	2.376	0.669
.SCS5	1.628	0.177	9.199	0.000	1.628	0.508
.SCS6	0.699	0.078	8.934	0.000	0.699	0.414
.RQ1	0.330	0.037	8.923	0.000	0.330	0.378
.RQ2	0.236	0.026	9.223	0.000	0.236	0.487
.RQ3	1.583	0.167	9.475	0.000	1.583	0.645
.RQ4	0.315	0.036	8.852	0.000	0.315	0.359
.RQ5	0.223	0.038	5.804	0.000	0.223	0.113
.RQ6	0.732	0.088	8.291	0.000	0.732	0.259
.RQ7	1.138	0.126	9.042	0.000	1.138	0.414
.RQ8	2.355	0.251	9.400	0.000	2.355	0.588
.ASDis1	0.860	0.094	9.202	0.000	0.860	0.381
.ASDis2	0.778	0.085	9.204	0.000	0.778	0.382
.ASDis3	0.747	0.080	9.358	0.000	0.747	0.463
.ASDis4	0.756	0.084	9.054	0.000	0.756	0.327
.ASDis5	0.870	0.095	9.205	0.000	0.870	0.383
.ASDis6	0.781	0.082	9.508	0.000	0.781	0.584
.ASDis7	0.695	0.074	9.334	0.000	0.695	0.448
.ASDis8	0.450	0.047	9.575	0.000	0.450	0.660
.ASDis9	0.337	0.040	8.392	0.000	0.337	0.199
.ASDis10	0.252	0.030	8.323	0.000	0.252	0.191
.ASDis11	0.378	0.044	8.503	0.000	0.378	0.213
.ASDis12	0.501	0.057	8.733	0.000	0.501	0.249
.ASDis13	0.735	0.082	8.939	0.000	0.735	0.294
.DirDirVL	1.052	0.244	4.314	0.000	0.796	0.796
.EnactmentAss	2.329	0.427	5.459	0.000	0.931	0.931
.SexTalkL	0.430	0.063	6.808	0.000	0.322	0.322
.EffDisL	0.191	0.055	3.494	0.000	0.177	0.177
.AODisL	0.289	0.076	3.820	0.000	0.256	0.256
.ARDisL	0.897	0.165	5.450	0.000	0.549	0.549
.SCSL	2.510	0.290	8.647	0.000	1.000	1.000
.RQL	0.544	0.084	6.449	0.000	1.000	1.000
.ASDisL	1.396	0.216	6.456	0.000	1.000	1.000

```
> fitMeasures(model_DisDirVer_Latent_fit)
      npar      fmin      chisq      df      pvalue
141.000    10.148   3856.382   1689.000      0.000
baseline.chisq  baseline.df  baseline.pvalue      cfi      tli
10888.764    1770.000      0.000      0.762      0.751
      nnfi      rfi      nfi      pnfi      ifi
      0.751      0.629      0.646      0.616      0.764
      rmi      logl  unrestricted.logl      aic      bic
      0.762  -17062.534  -15134.343   34407.069   34864.899
      ntotal      bic2      rmsea      rmsea.ci.lower  rmsea.ci.upper
190.000    34418.270      0.082      0.079      0.086
rmsea.ci.level  rmsea.pvalue  rmsea.close.h0  rmsea.notclose.pvalue  rmsea.notclose.h0
      0.900      0.000      0.050      0.854      0.080
      rmr      rmr_nomean      smmr      smmr_bentler  smmr_bentler_nomean
      0.206      0.206      0.090      0.090      0.090
      cmrm      cmrm_nomean      smmr_mplus      smmr_mplus_nomean      cn_05
      0.091      0.091      0.090      0.090      88.981
      cn_01      gfi      agfi      pgfi      mfi
      91.021      0.591      0.557      0.545      0.003
      ecvi
      21.781
```

Model Three: Disclosed Use of Direct-verbal Messages Improved Model

lavaan 0.6.15 ended normally after 78 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 92

Number of observations Used Total
 194 326

Model Test User Model:

Test statistic 965.418
 Degrees of freedom 503
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisDirVL =~						
DisVerbDir1	1.000				1.142	0.694
DisVerbDir2	1.130	0.164	6.879	0.000	1.290	0.741
DisVerbDir3	1.046	0.158	6.639	0.000	1.195	0.632
ASDisL =~						
ASDis9	1.000				1.228	0.950
ASDis10	0.899	0.029	30.845	0.000	1.104	0.966
ASDis11	0.970	0.042	23.337	0.000	1.191	0.902
ASDis12	0.939	0.053	17.669	0.000	1.154	0.820
ARDisL =~						
ARDis1	1.000				1.396	0.813
ARDis2	1.014	0.090	11.307	0.000	1.416	0.762
ARDis4	0.779	0.081	9.630	0.000	1.087	0.668
ARDis6	1.141	0.089	12.877	0.000	1.592	0.857
AODisL =~						
AODis1	1.000				1.054	0.611
AODis3	0.768	0.092	8.348	0.000	0.810	0.752
AODis4	1.256	0.137	9.179	0.000	1.324	0.875
AODis5	0.641	0.093	6.852	0.000	0.675	0.578
RQL =~						
RQ1	1.000				0.726	0.778
RQ4	1.030	0.084	12.292	0.000	0.748	0.799
RQ5	1.865	0.120	15.498	0.000	1.354	0.967
RQ6	1.945	0.148	13.161	0.000	1.412	0.843
SCSL =~						
SCS1	1.000				1.569	0.946
SCS3	0.961	0.052	18.370	0.000	1.507	0.855
SCS5	0.785	0.066	11.944	0.000	1.231	0.687
SCS6	0.637	0.043	14.806	0.000	0.999	0.774
EffDisL =~						
EffDis1	1.000				1.002	0.805
EffDis2	1.337	0.113	11.867	0.000	1.340	0.784
EffDis3	0.782	0.075	10.436	0.000	0.784	0.708
EffDis4	1.224	0.122	10.007	0.000	1.227	0.684
SexTalkL =~						
SexTalk1	1.000				1.160	0.892
SexTalk2	1.156	0.062	18.706	0.000	1.340	0.892
SexTalk4	1.042	0.061	17.103	0.000	1.209	0.857
SexTalk7	1.166	0.055	21.247	0.000	1.353	0.941
EnactmentAss =~						
PlanDis1	1.000				1.645	0.944
PlanDis2	0.822	0.100	8.216	0.000	1.352	0.723
SchDis1	0.437	0.078	5.619	0.000	0.718	0.441

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisDirVL ~						
ARDisL	-0.257	0.104	-2.474	0.013	-0.314	-0.314
AODisL	0.260	0.275	0.945	0.345	0.240	0.240
SCSL	0.019	0.112	0.170	0.865	0.026	0.026
SexTalkL	-0.013	0.194	-0.067	0.947	-0.013	-0.013
EffDisL	0.396	0.335	1.183	0.237	0.348	0.348
EnactmentAss	-0.008	0.069	-0.123	0.902	-0.012	-0.012
EnactmentAss ~						
EffDisL	-0.044	0.406	-0.108	0.914	-0.027	-0.027
AODisL	-0.730	0.303	-2.410	0.016	-0.468	-0.468
SexTalkL	0.364	0.202	1.798	0.072	0.256	0.256

```

SexTalkL ~
RQL      0.269  0.139  1.932  0.053  0.168  0.168
SCSL     0.494  0.068  7.257  0.000  0.669  0.669
EffDisL ~
SCSL     -0.027  0.068  -0.394  0.694  -0.042  -0.042
RQL      0.287  0.118  2.437  0.015  0.208  0.208
AODisL   0.695  0.106  6.546  0.000  0.731  0.731
ASDisL   0.087  0.063  1.364  0.173  0.106  0.106
SexTalkL 0.340  0.078  4.349  0.000  0.394  0.394
AODisL ~
ASDisL   -0.442  0.069  -6.434  0.000  -0.515  -0.515
ARDisL   0.317  0.060  5.321  0.000  0.419  0.419
ARDisL ~
ASDisL   -0.482  0.087  -5.521  0.000  -0.424  -0.424
SCSL     0.242  0.111  2.179  0.029  0.272  0.272
RQL      -0.286  0.239  -1.197  0.231  -0.149  -0.149

```

Covariances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
ASDisL ~~
RQL      -0.255  0.071  -3.590  0.000  -0.285  -0.285
SCSL     -0.508  0.151  -3.373  0.001  -0.263  -0.263
RQL ~~
SCSL     0.891  0.121  7.388  0.000  0.783  0.783

```

Variances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
.DisVerbDir1 1.405  0.217  6.464  0.000  1.405  0.518
.DisVerbDir2 1.370  0.249  5.509  0.000  1.370  0.451
.DisVerbDir3 2.148  0.286  7.507  0.000  2.148  0.601
.ASDis9      0.162  0.026  6.340  0.000  0.162  0.097
.ASDis10     0.088  0.018  4.939  0.000  0.088  0.067
.ASDis11     0.326  0.039  8.353  0.000  0.326  0.187
.ASDis12     0.648  0.071  9.167  0.000  0.648  0.327
.ARDis1      1.000  0.139  7.180  0.000  1.000  0.339
.ARDis2      1.443  0.181  7.980  0.000  1.443  0.419
.ARDis4      1.464  0.167  8.783  0.000  1.464  0.553
.ARDis6      0.913  0.150  6.090  0.000  0.913  0.265
.AODis1      1.869  0.203  9.195  0.000  1.869  0.627
.AODis3      0.505  0.060  8.391  0.000  0.505  0.435
.AODis4      0.540  0.089  6.092  0.000  0.540  0.235
.AODis5      0.908  0.098  9.297  0.000  0.908  0.666
.RQ1         0.344  0.038  9.051  0.000  0.344  0.395
.RQ4         0.316  0.035  8.905  0.000  0.316  0.361
.RQ5         0.127  0.041  3.117  0.002  0.127  0.065
.RQ6         0.812  0.096  8.458  0.000  0.812  0.290
.SCS1        0.292  0.065  4.469  0.000  0.292  0.106
.SCS3        0.838  0.105  8.000  0.000  0.838  0.269
.SCS5        1.693  0.182  9.285  0.000  1.693  0.528
.SCS6        0.666  0.075  8.882  0.000  0.666  0.400
.EffDis1     0.544  0.071  7.700  0.000  0.544  0.351
.EffDis2     1.124  0.140  8.007  0.000  1.124  0.385
.EffDis3     0.611  0.070  8.714  0.000  0.611  0.499
.EffDis4     1.712  0.193  8.860  0.000  1.712  0.532
.SexTalk1    0.346  0.044  7.875  0.000  0.346  0.204
.SexTalk2    0.461  0.059  7.872  0.000  0.461  0.204
.SexTalk4    0.528  0.062  8.466  0.000  0.528  0.266
.SexTalk7    0.239  0.040  5.984  0.000  0.239  0.115
.PlanDis1    0.330  0.272  1.215  0.225  0.330  0.109
.PlanDis2    1.668  0.250  6.666  0.000  1.668  0.477
.SchDis1     2.138  0.226  9.474  0.000  2.138  0.806
.DisDirVL    1.048  0.241  4.355  0.000  0.803  0.803
ASDisL      1.509  0.170  8.879  0.000  1.000  1.000
ARDisL      1.485  0.234  6.351  0.000  0.762  0.762
AODisL      0.403  0.098  4.102  0.000  0.363  0.363
RQL         0.527  0.083  6.376  0.000  1.000  1.000
SCSL        2.462  0.284  8.667  0.000  1.000  1.000
EffDisL     0.150  0.049  3.086  0.002  0.149  0.149
SexTalkL    0.469  0.068  6.905  0.000  0.349  0.349
.EnactmentAss 2.037  0.352  5.781  0.000  0.753  0.753

```

> fitMeasures(model_DisDirVer_Latent_fit)

```

npar      92.000
fmin      2.488
chisq     965.418
df        503.000
pvalue    0.000
baseline.chisq 5543.603
baseline.df 561.000
baseline.pvalue 0.000
cfi       0.907
nnfi     0.896
rfi      0.806
nfi      0.826
pnfi     0.740
ifl      0.908
rmi      0.907
logl     -9652.593
unrestricted.logl -9169.884
aic      19489.185
bic      19789.828
ntotal   194.000
bic2     19498.391
rmsea    0.069
rmsea.ci.lower 0.062
rmsea.ci.upper 0.075

```

rmsea.ci.level	rmsea.pvalue	rmsea.close.h0	rmsea.notclose.pvalue	rmsea.notclose.h0
0.900	0.000	0.050	0.002	0.080
rmr	rmr_nomean	smr	smr_bentler	smr_bentler_nomean
0.144	0.144	0.065	0.065	0.065
cmr	cmr_nomean	smr_mplus	smr_mplus_nomean	cn_05
0.067	0.067	0.065	0.065	112.785
cn_01	gfi	agfi	pgfi	mfi
117.493	0.784	0.744	0.663	0.304
ecvi				
5.925				

Model Three: Disclosed Use of Indirect-verbal Messages Hypothesized Model

lavaan 0.6.15 ended normally after 67 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 141

Number of observations Used Total
 190 326

Model Test User Model:

Test statistic 3807.520
 Degrees of freedom 1689
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisIndVL =~						
DisVerbInd1	1.000				1.460	0.793
DisVerbInd2	0.847	0.124	6.818	0.000	1.237	0.644
DisVerbInd3	0.718	0.103	6.940	0.000	1.048	0.679
EnactmentAss =~						
PlanDis1	1.000				1.554	0.894
PlanDis2	0.918	0.128	7.181	0.000	1.426	0.764
SchDis1	0.477	0.088	5.424	0.000	0.741	0.453
SexTalkL =~						
SexTalk1	1.000				1.155	0.881
SexTalk2	1.170	0.064	18.150	0.000	1.352	0.894
SexTalk3	1.028	0.092	11.183	0.000	1.188	0.681
SexTalk4	1.054	0.063	16.593	0.000	1.217	0.857
SexTalk5	0.918	0.088	10.458	0.000	1.061	0.650
SexTalk6	1.067	0.072	14.792	0.000	1.233	0.808
SexTalk7	1.170	0.058	20.100	0.000	1.352	0.934
EffDisL =~						
EffDis1	1.000				1.046	0.824
EffDis2	1.326	0.107	12.361	0.000	1.387	0.800
EffDis3	0.752	0.073	10.325	0.000	0.787	0.697
EffDis4	1.187	0.118	10.032	0.000	1.241	0.682
AODisL =~						
AODis1	1.000				1.066	0.612
AODis3	0.771	0.092	8.368	0.000	0.822	0.755
AODis4	1.239	0.135	9.189	0.000	1.322	0.873
AODis5	0.645	0.093	6.910	0.000	0.688	0.586
ARDisL =~						
ARDis1	1.000				1.277	0.737
ARDis2	0.961	0.109	8.850	0.000	1.226	0.657
ARDis3	0.598	0.080	7.471	0.000	0.763	0.558
ARDis4	1.001	0.094	10.700	0.000	1.278	0.787
ARDis5	0.864	0.091	9.534	0.000	1.104	0.705
ARDis6	1.121	0.108	10.408	0.000	1.431	0.766
ARDis7	0.660	0.074	8.977	0.000	0.843	0.666
ARDis8	0.489	0.097	5.041	0.000	0.625	0.380
ARDis9	0.798	0.106	7.507	0.000	1.019	0.561
ARDis10	0.432	0.077	5.595	0.000	0.552	0.421
ARDis11	0.644	0.089	7.262	0.000	0.822	0.543
ARDis12	0.179	0.095	1.889	0.059	0.229	0.144
SCSL =~						
SCS1	1.000				1.584	0.947
SCS2	0.527	0.079	6.705	0.000	0.835	0.454
SCS3	0.963	0.050	19.340	0.000	1.524	0.869
SCS4	0.686	0.075	9.131	0.000	1.087	0.576
SCS5	0.792	0.064	12.328	0.000	1.255	0.701
SCS6	0.628	0.043	14.495	0.000	0.995	0.766
RQL =~						
RQ1	1.000				0.737	0.789
RQ2	0.677	0.063	10.745	0.000	0.499	0.716
RQ3	1.267	0.147	8.620	0.000	0.934	0.596
RQ4	1.018	0.082	12.389	0.000	0.750	0.801
RQ5	1.800	0.116	15.483	0.000	1.327	0.942
RQ6	1.965	0.144	13.661	0.000	1.448	0.861
RQ7	1.720	0.147	11.676	0.000	1.268	0.765
RQ8	1.744	0.185	9.409	0.000	1.286	0.642
ASDisL =~						
ASDis1	1.000				1.182	0.787

ASDis2	0.949	0.078	12.171	0.000	1.121	0.786
ASDis3	0.788	0.071	11.130	0.000	0.931	0.733
ASDis4	1.057	0.082	12.883	0.000	1.248	0.820
ASDis5	1.003	0.082	12.167	0.000	1.185	0.786
ASDis6	0.632	0.066	9.529	0.000	0.747	0.645
ASDis7	0.783	0.069	11.321	0.000	0.925	0.743
ASDis8	0.407	0.048	8.462	0.000	0.481	0.583
ASDis9	0.984	0.068	14.524	0.000	1.163	0.895
ASDis10	0.874	0.060	14.628	0.000	1.032	0.899
ASDis11	0.999	0.070	14.344	0.000	1.181	0.887
ASDis12	1.040	0.075	13.879	0.000	1.228	0.866
ASDis13	1.124	0.085	13.300	0.000	1.328	0.840

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisIndVL ~						
ARDisL	0.074	0.187	0.398	0.691	0.065	0.065
AODisL	-0.556	0.358	-1.554	0.120	-0.406	-0.406
SCSL	-0.175	0.170	-1.031	0.302	-0.190	-0.190
SexTalkL	-0.043	0.193	-0.221	0.825	-0.034	-0.034
EffDisL	0.412	0.358	1.149	0.250	0.295	0.295
EnactmentAss ~						
EffDisL	-0.396	0.123	-3.232	0.001	-0.267	-0.267
SexTalkL ~						
RQL	0.425	0.134	3.173	0.002	0.271	0.271
SCSL	0.432	0.064	6.721	0.000	0.593	0.593
EffDisL ~						
SCSL	0.109	0.058	1.880	0.060	0.165	0.165
RQL	0.421	0.126	3.331	0.001	0.297	0.297
AODisL	0.780	0.127	6.123	0.000	0.795	0.795
ASDisL	0.146	0.085	1.725	0.085	0.165	0.165
AODisL ~						
ASDisL	-0.431	0.077	-5.583	0.000	-0.478	-0.478
ARDisL	0.398	0.074	5.412	0.000	0.477	0.477
ARDisL ~						
ASDisL	-0.630	0.089	-7.063	0.000	-0.583	-0.583
SCSL	0.275	0.090	3.050	0.002	0.341	0.341
RQL	-0.283	0.192	-1.473	0.141	-0.163	-0.163

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
SCSL ~ ~						
RQL	0.918	0.124	7.404	0.000	0.786	0.786
ASDisL	-0.580	0.152	-3.803	0.000	-0.310	-0.310
RQL ~ ~						
ASDisL	-0.293	0.073	-4.004	0.000	-0.336	-0.336

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.DisVerbInd1	1.260	0.289	4.354	0.000	1.260	0.372
.DisVerbInd2	2.164	0.293	7.391	0.000	2.164	0.586
.DisVerbInd3	1.284	0.189	6.793	0.000	1.284	0.539
.PlanDis1	0.606	0.304	1.991	0.046	0.606	0.201
.PlanDis2	1.452	0.292	4.963	0.000	1.452	0.416
.SchDis1	2.128	0.231	9.213	0.000	2.128	0.795
.SexTalk1	0.386	0.047	8.205	0.000	0.386	0.224
.SexTalk2	0.460	0.058	7.971	0.000	0.460	0.201
.SexTalk3	1.632	0.174	9.368	0.000	1.632	0.536
.SexTalk4	0.535	0.063	8.518	0.000	0.535	0.265
.SexTalk5	1.535	0.163	9.426	0.000	1.535	0.577
.SexTalk6	0.808	0.091	8.918	0.000	0.808	0.347
.SexTalk7	0.268	0.040	6.707	0.000	0.268	0.128
.EffDis1	0.517	0.071	7.300	0.000	0.517	0.321
.EffDis2	1.083	0.141	7.706	0.000	1.083	0.360
.EffDis3	0.654	0.075	8.683	0.000	0.654	0.514
.EffDis4	1.776	0.202	8.773	0.000	1.776	0.536
.AODis1	1.894	0.207	9.150	0.000	1.894	0.625
.AODis3	0.509	0.061	8.402	0.000	0.509	0.430
.AODis4	0.547	0.086	6.353	0.000	0.547	0.239
.AODis5	0.903	0.098	9.227	0.000	0.903	0.656
.ARDis1	1.369	0.160	8.566	0.000	1.369	0.457
.ARDis2	1.981	0.220	8.996	0.000	1.981	0.568
.ARDis3	1.285	0.138	9.300	0.000	1.285	0.688
.ARDis4	1.004	0.124	8.132	0.000	1.004	0.381
.ARDis5	1.231	0.140	8.767	0.000	1.231	0.503
.ARDis6	1.439	0.173	8.334	0.000	1.439	0.413
.ARDis7	0.891	0.099	8.958	0.000	0.891	0.557
.ARDis8	2.307	0.241	9.580	0.000	2.307	0.855
.ARDis9	2.261	0.243	9.294	0.000	2.261	0.685
.ARDis10	1.411	0.148	9.534	0.000	1.411	0.822
.ARDis11	1.614	0.173	9.334	0.000	1.614	0.705

.ARDis12	2.491	0.256	9.726	0.000	2.491	0.979
.SCS1	0.288	0.061	4.746	0.000	0.288	0.103
.SCS2	2.688	0.280	9.603	0.000	2.688	0.794
.SCS3	0.755	0.096	7.876	0.000	0.755	0.245
.SCS4	2.372	0.251	9.468	0.000	2.372	0.668
.SCS5	1.629	0.177	9.199	0.000	1.629	0.508
.SCS6	0.699	0.078	8.933	0.000	0.699	0.414
.RQ1	0.330	0.037	8.925	0.000	0.330	0.378
.RQ2	0.236	0.026	9.224	0.000	0.236	0.487
.RQ3	1.583	0.167	9.476	0.000	1.583	0.645
.RQ4	0.315	0.036	8.852	0.000	0.315	0.359
.RQ5	0.223	0.038	5.798	0.000	0.223	0.112
.RQ6	0.732	0.088	8.292	0.000	0.732	0.259
.RQ7	1.138	0.126	9.043	0.000	1.138	0.414
.RQ8	2.355	0.250	9.400	0.000	2.355	0.588
.ASDis1	0.860	0.093	9.202	0.000	0.860	0.381
.ASDis2	0.778	0.085	9.204	0.000	0.778	0.382
.ASDis3	0.746	0.080	9.358	0.000	0.746	0.463
.ASDis4	0.757	0.084	9.055	0.000	0.757	0.327
.ASDis5	0.870	0.095	9.205	0.000	0.870	0.383
.ASDis6	0.781	0.082	9.508	0.000	0.781	0.584
.ASDis7	0.695	0.074	9.334	0.000	0.695	0.448
.ASDis8	0.450	0.047	9.574	0.000	0.450	0.660
.ASDis9	0.337	0.040	8.394	0.000	0.337	0.199
.ASDis10	0.252	0.030	8.322	0.000	0.252	0.191
.ASDis11	0.378	0.044	8.504	0.000	0.378	0.213
.ASDis12	0.501	0.057	8.733	0.000	0.501	0.249
.ASDis13	0.736	0.082	8.941	0.000	0.736	0.294
.DisIndVL	1.908	0.385	4.954	0.000	0.896	0.896
.EnactmentAss	2.244	0.405	5.537	0.000	0.929	0.929
.SexTalkL	0.430	0.063	6.809	0.000	0.322	0.322
.EffDisL	0.187	0.055	3.415	0.001	0.171	0.171
.AODisL	0.291	0.076	3.831	0.000	0.256	0.256
.ARDisL	0.890	0.164	5.436	0.000	0.546	0.546
.SCSL	2.508	0.290	8.641	0.000	1.000	1.000
.RQL	0.543	0.084	6.446	0.000	1.000	1.000
.ASDisL	1.396	0.216	6.457	0.000	1.000	1.000

```
> fitMeasures(model_DisIndVer_Latent_fit)
      npar      fmin      chisq      df      pvalue
141.000    10.020   3807.520   1689.000    0.000
baseline.chisq  baseline.df  baseline.pvalue      cfi      tli
10840.704    1770.000      0.000      0.766    0.755
      nnfi      rfi      nfi      pnfi      ifi
0.755    0.632    0.649    0.619    0.769
      rmi      logl  unrestricted.logl      aic      bic
0.766  -17062.986  -15159.225   34407.971  34865.802
ntotal      bic2      rmsea  rmsea.ci.lower  rmsea.ci.upper
190.000   34419.172      0.081    0.078      0.085
rmsea.ci.level  rmsea.pvalue  rmsea.close.h0  rmsea.notclose.pvalue  rmsea.notclose.h0
0.900      0.000      0.050    0.728      0.080
      rmr      rmr_nomean      smmr      smmr_bentler  smmr_bentler_nomean
0.206      0.206      0.090    0.090      0.090
      cmrm      cmrm_nomean      smmr_mplus      smmr_mplus_nomean      cn_05
0.092      0.092      0.090    0.090      90.110
      cn_01      gfi      agfi      pgfi      mfi
92.177      0.592      0.558      0.546      0.004
      ecvi
21.524
```

Model Three: Disclosed Use of Indirect-verbal Messages Improved Model

lavaan 0.6.15 ended normally after 79 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 92

Number of observations Used Total
 194 326

Model Test User Model:

Test statistic 968.756
 Degrees of freedom 503
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisIndVL =~						
DisVerbInd1	1.000				1.462	0.797
DisVerbInd2	0.848	0.121	7.002	0.000	1.239	0.646
DisVerbInd3	0.719	0.101	7.140	0.000	1.051	0.684
ASDisL =~						
ASDis9	1.000				1.228	0.950
ASDis10	0.899	0.029	30.855	0.000	1.104	0.966
ASDis11	0.970	0.042	23.323	0.000	1.191	0.902
ASDis12	0.939	0.053	17.663	0.000	1.154	0.820
ARDisL =~						
ARDis1	1.000				1.398	0.814
ARDis2	1.015	0.089	11.351	0.000	1.419	0.765
ARDis4	0.775	0.081	9.594	0.000	1.083	0.666
ARDis6	1.136	0.088	12.855	0.000	1.589	0.856
AODisL =~						
AODis1	1.000				1.060	0.614
AODis3	0.764	0.091	8.395	0.000	0.810	0.752
AODis4	1.244	0.135	9.220	0.000	1.318	0.870
AODis5	0.635	0.093	6.860	0.000	0.673	0.576
RQL =~						
RQ1	1.000				0.726	0.777
RQ4	1.031	0.084	12.288	0.000	0.748	0.800
RQ5	1.866	0.120	15.490	0.000	1.354	0.967
RQ6	1.946	0.148	13.153	0.000	1.412	0.843
SCSL =~						
SCS1	1.000				1.569	0.946
SCS3	0.961	0.052	18.378	0.000	1.507	0.855
SCS5	0.784	0.066	11.934	0.000	1.230	0.687
SCS6	0.637	0.043	14.810	0.000	0.999	0.774
EffDisL =~						
EffDis1	1.000				1.006	0.809
EffDis2	1.332	0.112	11.908	0.000	1.339	0.784
EffDis3	0.772	0.075	10.341	0.000	0.776	0.701
EffDis4	1.216	0.122	9.995	0.000	1.223	0.682
SexTalkL =~						
SexTalk1	1.000				1.160	0.892
SexTalk2	1.155	0.062	18.718	0.000	1.340	0.892
SexTalk4	1.042	0.061	17.118	0.000	1.209	0.857
SexTalk7	1.166	0.055	21.250	0.000	1.352	0.940
EnactmentAss =~						
PlanDis1	1.000				1.618	0.929
PlanDis2	0.848	0.100	8.474	0.000	1.373	0.734
SchDis1	0.451	0.079	5.744	0.000	0.730	0.448

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisIndVL ~						
ARDisL	0.116	0.130	0.892	0.372	0.111	0.111
AODisL	-0.563	0.365	-1.542	0.123	-0.408	-0.408
SCSL	-0.104	0.145	-0.715	0.474	-0.112	-0.112
SexTalkL	-0.176	0.253	-0.694	0.488	-0.139	-0.139
EffDisL	0.401	0.439	0.914	0.361	0.276	0.276
EnactmentAss	0.145	0.094	1.544	0.122	0.160	0.160
EnactmentAss ~						
EffDisL	-0.013	0.408	-0.031	0.975	-0.008	-0.008
AODisL	-0.745	0.305	-2.444	0.015	-0.488	-0.488
SexTalkL	0.343	0.202	1.700	0.089	0.246	0.246

```

SexTalkL ~
RQL      0.269  0.139  1.931  0.054  0.168  0.168
SCSL     0.494  0.068  7.259  0.000  0.669  0.669
EffDisL ~
SCSL     -0.028  0.068  -0.409  0.683  -0.044  -0.044
RQL      0.293  0.117  2.499  0.012  0.211  0.211
AODisL   0.719  0.107  6.703  0.000  0.757  0.757
ASDisL   0.110  0.063  1.727  0.084  0.134  0.134
SexTalkL 0.339  0.078  4.337  0.000  0.391  0.391
AODisL ~
ASDisL   -0.447  0.069  -6.490  0.000  -0.518  -0.518
ARDisL   0.318  0.059  5.352  0.000  0.420  0.420
ARDisL ~
ASDisL   -0.485  0.087  -5.543  0.000  -0.426  -0.426
SCSL     0.243  0.111  2.180  0.029  0.272  0.272
RQL      -0.289  0.240  -1.205  0.228  -0.150  -0.150

```

Covariances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
ASDisL ~~
RQL      -0.254  0.071  -3.589  0.000  -0.285  -0.285
SCSL     -0.508  0.151  -3.377  0.001  -0.264  -0.264
RQL ~~
SCSL     0.891  0.121  7.387  0.000  0.783  0.783

```

Variances:

```

Estimate Std.Err z-value P(>|z|) Std.lv Std.all
.DisVerbInd1 1.230 0.281 4.383 0.000 1.230 0.365
.DisVerbInd2 2.138 0.285 7.489 0.000 2.138 0.582
.DisVerbInd3 1.255 0.183 6.842 0.000 1.255 0.532
.ASDis9      0.162 0.026 6.353 0.000 0.162 0.097
.ASDis10     0.088 0.018 4.924 0.000 0.088 0.067
.ASDis11     0.326 0.039 8.357 0.000 0.326 0.187
.ASDis12     0.648 0.071 9.168 0.000 0.648 0.328
.ARDis1      0.993 0.139 7.128 0.000 0.993 0.337
.ARDis2      1.432 0.180 7.940 0.000 1.432 0.415
.ARDis4      1.472 0.168 8.788 0.000 1.472 0.556
.ARDis6      0.922 0.151 6.107 0.000 0.922 0.267
.AODis1      1.858 0.202 9.187 0.000 1.858 0.623
.AODis3      0.505 0.060 8.400 0.000 0.505 0.435
.AODis4      0.556 0.089 6.264 0.000 0.556 0.243
.AODis5      0.910 0.098 9.305 0.000 0.910 0.668
.RQ1         0.345 0.038 9.055 0.000 0.345 0.396
.RQ4         0.316 0.035 8.907 0.000 0.316 0.361
.RQ5         0.127 0.041 3.106 0.002 0.127 0.065
.RQ6         0.812 0.096 8.462 0.000 0.812 0.290
.SCS1        0.291 0.065 4.469 0.000 0.291 0.106
.SCS3        0.838 0.105 8.002 0.000 0.838 0.269
.SCS5        1.695 0.182 9.288 0.000 1.695 0.528
.SCS6        0.666 0.075 8.883 0.000 0.666 0.400
.EffDis1     0.535 0.070 7.627 0.000 0.535 0.346
.EffDis2     1.123 0.141 7.992 0.000 1.123 0.385
.EffDis3     0.623 0.071 8.748 0.000 0.623 0.508
.EffDis4     1.720 0.194 8.862 0.000 1.720 0.535
.SexTalk1    0.345 0.044 7.866 0.000 0.345 0.204
.SexTalk2    0.461 0.059 7.870 0.000 0.461 0.204
.SexTalk4    0.528 0.062 8.463 0.000 0.528 0.265
.SexTalk7    0.240 0.040 5.998 0.000 0.240 0.116
.PlanDis1    0.416 0.256 1.627 0.104 0.416 0.137
.PlanDis2    1.612 0.246 6.550 0.000 1.612 0.461
.SchDis1     2.121 0.225 9.437 0.000 2.121 0.799
.DisIndVL    1.917 0.378 5.077 0.000 0.897 0.897
ASDisL      1.509 0.170 8.877 0.000 1.000 1.000
ARDisL      1.489 0.234 6.361 0.000 0.761 0.761
AODisL      0.401 0.098 4.115 0.000 0.357 0.357
RQL         0.526 0.083 6.373 0.000 1.000 1.000
SCSL        2.462 0.284 8.669 0.000 1.000 1.000
EffDisL     0.142 0.048 2.946 0.003 0.141 0.141
SexTalkL    0.469 0.068 6.907 0.000 0.349 0.349
.EnactmentAss 1.957 0.336 5.820 0.000 0.747 0.747

```

> fitMeasures(model_DisIndVer_Latent_fit)

```

npar      92.000      fmin      2.497      chisq      968.756      df      503.000      pvalue      0.000
baseline.chisq 5551.408 baseline.df 561.000 baseline.pvalue 0.000 cfi 0.907 tli 0.896
nnfi      0.896      rfi      0.805      nfi      0.825      pnfi     0.740      ifi     0.908
rmi      0.907      logl    -9649.406      unrestricted.logl -9165.028      aic      19482.812      bic      19783.455
ntotal   194.000      bic2    19492.017      rmsea    0.069      rmsea.ci.lower 0.063      rmsea.ci.upper 0.076

```

rmsea.ci.level	rmsea.pvalue	rmsea.close.h0	rmsea.notclose.pvalue	rmsea.notclose.h0
0.900	0.000	0.050	0.003	0.080
rmr	rmr_nomean	smr	smr_bentler	smr_bentler_nomean
0.145	0.145	0.066	0.066	0.066
cmr	cmr_nomean	smr_mplus	smr_mplus_nomean	cn_05
0.068	0.068	0.066	0.066	112.399
cn_01	gfi	agfi	pgfi	mfi
117.091	0.783	0.744	0.662	0.301
ecvi				
5.942				

Model Three: Disclosed Use of Direct-nonverbal Messages Hypothesized Model

lavaan 0.6.15 ended normally after 68 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 141

Number of observations Used Total
 190 326

Model Test User Model:

Test statistic 3826.947
 Degrees of freedom 1689
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisDirNVL =~						
DisNVDir1	1.000				1.242	0.702
DisNVDir2	1.361	0.123	11.072	0.000	1.690	0.908
DisNVDir3	1.502	0.136	11.050	0.000	1.865	0.889
EnactmentAss =~						
PlanDis1	1.000				1.554	0.894
PlanDis2	0.915	0.123	7.444	0.000	1.423	0.762
SchDis1	0.482	0.087	5.540	0.000	0.749	0.458
SexTalkL =~						
SexTalk1	1.000				1.155	0.880
SexTalk2	1.171	0.065	18.119	0.000	1.352	0.894
SexTalk3	1.030	0.092	11.195	0.000	1.190	0.682
SexTalk4	1.055	0.064	16.590	0.000	1.218	0.858
SexTalk5	0.919	0.088	10.455	0.000	1.061	0.650
SexTalk6	1.068	0.072	14.790	0.000	1.233	0.808
SexTalk7	1.171	0.058	20.038	0.000	1.352	0.933
EffDisL =~						
EffDis1	1.000				1.046	0.824
EffDis2	1.325	0.107	12.345	0.000	1.386	0.800
EffDis3	0.752	0.073	10.331	0.000	0.787	0.698
EffDis4	1.188	0.118	10.044	0.000	1.243	0.683
AODisL =~						
AODis1	1.000				1.068	0.614
AODis3	0.772	0.092	8.395	0.000	0.824	0.757
AODis4	1.241	0.135	9.214	0.000	1.325	0.875
AODis5	0.646	0.093	6.933	0.000	0.690	0.588
ARDisL =~						
ARDis1	1.000				1.282	0.740
ARDis2	0.959	0.108	8.904	0.000	1.230	0.659
ARDis3	0.598	0.079	7.529	0.000	0.767	0.561
ARDis4	0.997	0.093	10.758	0.000	1.278	0.787
ARDis5	0.859	0.090	9.550	0.000	1.101	0.704
ARDis6	1.118	0.107	10.469	0.000	1.433	0.767
ARDis7	0.656	0.073	8.986	0.000	0.841	0.664
ARDis8	0.483	0.097	5.004	0.000	0.620	0.377
ARDis9	0.794	0.106	7.517	0.000	1.018	0.560
ARDis10	0.428	0.077	5.570	0.000	0.549	0.419
ARDis11	0.638	0.088	7.236	0.000	0.817	0.540
ARDis12	0.181	0.095	1.915	0.055	0.232	0.146
SCSL =~						
SCS1	1.000				1.586	0.948
SCS2	0.526	0.079	6.697	0.000	0.834	0.453
SCS3	0.960	0.050	19.330	0.000	1.522	0.868
SCS4	0.685	0.075	9.133	0.000	1.086	0.576
SCS5	0.791	0.064	12.328	0.000	1.254	0.700
SCS6	0.627	0.043	14.491	0.000	0.994	0.765
RQL =~						
RQ1	1.000				0.737	0.789
RQ2	0.677	0.063	10.749	0.000	0.499	0.717
RQ3	1.266	0.147	8.622	0.000	0.934	0.596
RQ4	1.018	0.082	12.395	0.000	0.750	0.801
RQ5	1.799	0.116	15.487	0.000	1.326	0.942
RQ6	1.964	0.144	13.665	0.000	1.448	0.861
RQ7	1.720	0.147	11.680	0.000	1.268	0.765
RQ8	1.744	0.185	9.411	0.000	1.286	0.642
ASDisL =~						
ASDis1	1.000				1.181	0.786

ASDis2	0.949	0.078	12.166	0.000	1.121	0.786
ASDis3	0.788	0.071	11.124	0.000	0.930	0.733
ASDis4	1.057	0.082	12.881	0.000	1.248	0.821
ASDis5	1.003	0.082	12.164	0.000	1.185	0.786
ASDis6	0.632	0.066	9.526	0.000	0.746	0.645
ASDis7	0.783	0.069	11.312	0.000	0.924	0.743
ASDis8	0.407	0.048	8.455	0.000	0.481	0.582
ASDis9	0.984	0.068	14.519	0.000	1.163	0.895
ASDis10	0.874	0.060	14.621	0.000	1.032	0.899
ASDis11	1.000	0.070	14.340	0.000	1.181	0.887
ASDis12	1.040	0.075	13.878	0.000	1.229	0.867
ASDis13	1.125	0.085	13.301	0.000	1.329	0.840

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisDirNVL ~						
ARDisL	0.186	0.144	1.295	0.195	0.192	0.192
AODisL	-0.224	0.268	-0.837	0.403	-0.193	-0.193
SCSL	-0.136	0.130	-1.046	0.295	-0.174	-0.174
SexTalkL	-0.105	0.149	-0.705	0.481	-0.098	-0.098
EffDisL	0.116	0.269	0.431	0.666	0.098	0.098
EnactmentAss	0.190	0.070	2.725	0.006	0.238	0.238
EnactmentAss ~						
EffDisL	-0.395	0.123	-3.224	0.001	-0.266	-0.266
SexTalkL ~						
RQL	0.425	0.134	3.170	0.002	0.271	0.271
SCSL	0.431	0.064	6.714	0.000	0.592	0.592
EffDisL ~						
SCSL	0.113	0.059	1.923	0.054	0.171	0.171
RQL	0.414	0.127	3.253	0.001	0.292	0.292
AODisL	0.753	0.125	6.046	0.000	0.769	0.769
ASDisL	0.122	0.084	1.454	0.146	0.138	0.138
AODisL ~						
ASDisL	-0.427	0.077	-5.522	0.000	-0.472	-0.472
ARDisL	0.398	0.074	5.404	0.000	0.477	0.477
ARDisL ~						
ASDisL	-0.632	0.089	-7.071	0.000	-0.582	-0.582
SCSL	0.278	0.091	3.075	0.002	0.344	0.344
RQL	-0.291	0.193	-1.505	0.132	-0.167	-0.167

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
SCSL ~ ~						
RQL	0.920	0.124	7.412	0.000	0.787	0.787
ASDisL	-0.579	0.152	-3.798	0.000	-0.309	-0.309
RQL ~ ~						
ASDisL	-0.293	0.073	-4.005	0.000	-0.336	-0.336

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.DisNVDDir1	1.587	0.182	8.705	0.000	1.587	0.507
.DisNVDDir2	0.605	0.158	3.825	0.000	0.605	0.175
.DisNVDDir3	0.922	0.201	4.585	0.000	0.922	0.210
.PlanDis1	0.605	0.291	2.082	0.037	0.605	0.200
.PlanDis2	1.463	0.282	5.184	0.000	1.463	0.420
.SchDis1	2.117	0.230	9.208	0.000	2.117	0.791
.SexTalk1	0.388	0.047	8.214	0.000	0.388	0.225
.SexTalk2	0.460	0.058	7.969	0.000	0.460	0.201
.SexTalk3	1.628	0.174	9.366	0.000	1.628	0.535
.SexTalk4	0.533	0.063	8.511	0.000	0.533	0.264
.SexTalk5	1.534	0.163	9.426	0.000	1.534	0.577
.SexTalk6	0.807	0.090	8.915	0.000	0.807	0.347
.SexTalk7	0.270	0.040	6.721	0.000	0.270	0.129
.EffDis1	0.516	0.071	7.276	0.000	0.516	0.321
.EffDis2	1.084	0.141	7.695	0.000	1.084	0.361
.EffDis3	0.653	0.075	8.671	0.000	0.653	0.513
.EffDis4	1.771	0.202	8.760	0.000	1.771	0.534
.AODis1	1.889	0.207	9.135	0.000	1.889	0.623
.AODis3	0.505	0.060	8.357	0.000	0.505	0.426
.AODis4	0.537	0.086	6.210	0.000	0.537	0.234
.AODis5	0.900	0.098	9.212	0.000	0.900	0.654
.ARDis1	1.357	0.159	8.549	0.000	1.357	0.452
.ARDis2	1.974	0.220	8.991	0.000	1.974	0.566
.ARDis3	1.279	0.138	9.294	0.000	1.279	0.685
.ARDis4	1.003	0.123	8.134	0.000	1.003	0.380
.ARDis5	1.237	0.141	8.778	0.000	1.237	0.505
.ARDis6	1.435	0.172	8.330	0.000	1.435	0.411
.ARDis7	0.894	0.100	8.967	0.000	0.894	0.559
.ARDis8	2.314	0.241	9.584	0.000	2.314	0.858
.ARDis9	2.263	0.243	9.296	0.000	2.263	0.686
.ARDis10	1.414	0.148	9.538	0.000	1.414	0.824
.ARDis11	1.621	0.174	9.341	0.000	1.621	0.708

```

.ARDis12      2.490  0.256  9.726  0.000  2.490  0.979
.SCS1         0.281  0.060  4.669  0.000  0.281  0.101
.SCS2         2.690  0.280  9.605  0.000  2.690  0.795
.SCS3         0.762  0.096  7.914  0.000  0.762  0.247
.SCS4         2.374  0.251  9.472  0.000  2.374  0.668
.SCS5         1.632  0.177  9.206  0.000  1.632  0.509
.SCS6         0.701  0.078  8.945  0.000  0.701  0.415
.RQ1          0.330  0.037  8.924  0.000  0.330  0.378
.RQ2          0.236  0.026  9.223  0.000  0.236  0.487
.RQ3          1.583  0.167  9.475  0.000  1.583  0.645
.RQ4          0.315  0.036  8.851  0.000  0.315  0.359
.RQ5          0.223  0.038  5.804  0.000  0.223  0.113
.RQ6          0.733  0.088  8.292  0.000  0.733  0.259
.RQ7          1.138  0.126  9.043  0.000  1.138  0.414
.RQ8          2.355  0.250  9.400  0.000  2.355  0.588
.ASDis1       0.861  0.094  9.202  0.000  0.861  0.381
.ASDis2       0.778  0.085  9.204  0.000  0.778  0.382
.ASDis3       0.747  0.080  9.358  0.000  0.747  0.463
.ASDis4       0.756  0.084  9.054  0.000  0.756  0.327
.ASDis5       0.870  0.094  9.205  0.000  0.870  0.383
.ASDis6       0.781  0.082  9.508  0.000  0.781  0.584
.ASDis7       0.695  0.074  9.334  0.000  0.695  0.449
.ASDis8       0.450  0.047  9.575  0.000  0.450  0.661
.ASDis9       0.337  0.040  8.392  0.000  0.337  0.199
.ASDis10      0.252  0.030  8.322  0.000  0.252  0.191
.ASDis11      0.378  0.044  8.502  0.000  0.378  0.213
.ASDis12      0.501  0.057  8.731  0.000  0.501  0.249
.ASDis13      0.735  0.082  8.938  0.000  0.735  0.294
.DisDirNVL    1.357  0.257  5.273  0.000  0.880  0.880
.EnactmentAss 2.245  0.396  5.669  0.000  0.929  0.929
.SexTalkL     0.430  0.063  6.804  0.000  0.322  0.322
.EffDisL      0.196  0.055  3.542  0.000  0.179  0.179
.AODisL       0.301  0.078  3.858  0.000  0.264  0.264
.ARDisL       0.898  0.164  5.464  0.000  0.547  0.547
.SCSL         2.515  0.290  8.664  0.000  1.000  1.000
RQL           0.544  0.084  6.448  0.000  1.000  1.000
ASDisL        1.396  0.216  6.455  0.000  1.000  1.000

```

```

> fitMeasures(model_DisDirNV_Latent_fit)
      npar      fmin      chisq      df      pvalue
141.000    10.071    3826.947    1689.000    0.000
baseline.chisq  baseline.df  baseline.pvalue      cfi      tli
11035.649    1770.000      0.000      0.769    0.758
      nnfi      rfi      nfi      pnfi      ifi
0.758      0.637      0.653      0.623      0.771
      rmi      logl  unrestricted.logl      aic      bic
0.769    -17014.754    -15101.281    34311.509    34769.339
ntotal      bic2      rmsea      rmsea.ci.lower  rmsea.ci.upper
190.000    34322.710      0.082      0.078      0.085
rmsea.ci.level  rmsea.pvalue  rmsea.close.h0  rmsea.notclose.pvalue  rmsea.notclose.h0
0.900      0.000      0.050      0.784      0.080
      rmr      rmr_nomean      smmr      smmr_bentler  smmr_bentler_nomean
0.211      0.211      0.091      0.091      0.091
      cmrm      cmrm_nomean      smmr_mplus      smmr_mplus_nomean      cn_05
0.092      0.092      0.091      0.091      89.657
      cn_01      gfi      agfi      pgfi      mfi
91.714      0.590      0.556      0.545      0.004
      ecvi
21.626

```

Model Three: Disclosed Use of Direct-nonverbal Messages Improved Model

lavaan 0.6.15 ended normally after 68 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 92

Number of observations Used Total
 194 326

Model Test User Model:

Test statistic 981.952
 Degrees of freedom 503
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisDirNVL =~						
DisDirNVL1	1.000				1.228	0.701
DisDirNVL2	1.361	0.122	11.163	0.000	1.672	0.910
DisDirNVL3	1.501	0.135	11.142	0.000	1.843	0.888
ASDisL =~						
ASDis9	1.000				1.228	0.950
ASDis10	0.899	0.029	30.844	0.000	1.104	0.966
ASDis11	0.970	0.042	23.330	0.000	1.191	0.902
ASDis12	0.939	0.053	17.668	0.000	1.154	0.820
ARDisL =~						
ARDis1	1.000				1.405	0.818
ARDis2	1.010	0.089	11.390	0.000	1.419	0.764
ARDis4	0.773	0.080	9.655	0.000	1.086	0.668
ARDis6	1.126	0.087	12.869	0.000	1.581	0.852
AODisL =~						
AODis1	1.000				1.061	0.614
AODis3	0.765	0.091	8.409	0.000	0.812	0.753
AODis4	1.247	0.135	9.233	0.000	1.322	0.873
AODis5	0.637	0.093	6.882	0.000	0.676	0.579
RQL =~						
RQ1	1.000				0.726	0.777
RQ4	1.031	0.084	12.292	0.000	0.748	0.800
RQ5	1.866	0.120	15.490	0.000	1.354	0.967
RQ6	1.946	0.148	13.155	0.000	1.412	0.843
SCSL =~						
SCS1	1.000				1.572	0.947
SCS3	0.957	0.052	18.371	0.000	1.505	0.853
SCS5	0.781	0.066	11.927	0.000	1.228	0.686
SCS6	0.635	0.043	14.804	0.000	0.998	0.773
EffDisL =~						
EffDis1	1.000				1.007	0.809
EffDis2	1.330	0.112	11.907	0.000	1.339	0.784
EffDis3	0.771	0.075	10.348	0.000	0.777	0.701
EffDis4	1.217	0.121	10.018	0.000	1.225	0.683
SexTalkL =~						
SexTalk1	1.000				1.160	0.892
SexTalk2	1.156	0.062	18.705	0.000	1.340	0.892
SexTalk4	1.043	0.061	17.116	0.000	1.209	0.857
SexTalk7	1.166	0.055	21.225	0.000	1.352	0.940
EnactmentAss =~						
PlanDis1	1.000				1.610	0.924
PlanDis2	0.856	0.099	8.688	0.000	1.378	0.737
SchDis1	0.459	0.078	5.851	0.000	0.739	0.453

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisDirNVL ~						
ARDisL	0.199	0.100	1.982	0.047	0.228	0.228
AODisL	-0.134	0.270	-0.495	0.621	-0.115	-0.115
SCSL	-0.135	0.110	-1.223	0.221	-0.173	-0.173
SexTalkL	-0.051	0.191	-0.269	0.788	-0.048	-0.048
EffDisL	-0.005	0.325	-0.014	0.989	-0.004	-0.004
EnactmentAss	0.191	0.075	2.566	0.010	0.251	0.251
EnactmentAss ~						
EffDisL	-0.019	0.402	-0.048	0.961	-0.012	-0.012
AODisL	-0.737	0.300	-2.456	0.014	-0.486	-0.486
SexTalkL	0.343	0.200	1.716	0.086	0.247	0.247

SexTalkL ~						
RQL	0.269	0.139	1.932	0.053	0.168	0.168
SCSL	0.493	0.068	7.250	0.000	0.668	0.668
EffDisL ~						
SCSL	-0.026	0.069	-0.383	0.702	-0.041	-0.041
RQL	0.289	0.118	2.441	0.015	0.208	0.208
AODisL	0.701	0.106	6.623	0.000	0.738	0.738
ASDisL	0.093	0.064	1.457	0.145	0.113	0.113
SexTalkL	0.339	0.078	4.329	0.000	0.391	0.391
AODisL ~						
ASDisL	-0.442	0.069	-6.419	0.000	-0.512	-0.512
ARDisL	0.318	0.059	5.344	0.000	0.421	0.421
ARDisL ~						
ASDisL	-0.487	0.088	-5.553	0.000	-0.426	-0.426
SCSL	0.247	0.112	2.208	0.027	0.276	0.276
RQL	-0.296	0.241	-1.228	0.220	-0.153	-0.153

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
ASDisL ~~						
RQL	-0.254	0.071	-3.590	0.000	-0.285	-0.285
SCSL	-0.508	0.151	-3.373	0.001	-0.263	-0.263
RQL ~~						
SCSL	0.893	0.121	7.396	0.000	0.783	0.783

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.DisNVD1r1	1.559	0.177	8.799	0.000	1.559	0.508
.DisNVD1r2	0.583	0.154	3.791	0.000	0.583	0.172
.DisNVD1r3	0.913	0.196	4.662	0.000	0.913	0.212
.ASDis9	0.162	0.026	6.343	0.000	0.162	0.097
.ASDis10	0.088	0.018	4.931	0.000	0.088	0.067
.ASDis11	0.326	0.039	8.354	0.000	0.326	0.187
.ASDis12	0.648	0.071	9.167	0.000	0.648	0.327
.ARDis1	0.975	0.138	7.061	0.000	0.975	0.331
.ARDis2	1.435	0.181	7.949	0.000	1.435	0.416
.ARDis4	1.466	0.167	8.778	0.000	1.466	0.554
.ARDis6	0.947	0.152	6.242	0.000	0.947	0.275
.AODis1	1.856	0.202	9.176	0.000	1.856	0.623
.AODis3	0.502	0.060	8.363	0.000	0.502	0.433
.AODis4	0.546	0.089	6.125	0.000	0.546	0.238
.AODis5	0.907	0.098	9.291	0.000	0.907	0.665
.RQ1	0.345	0.038	9.053	0.000	0.345	0.396
.RQ4	0.315	0.035	8.904	0.000	0.315	0.360
.RQ5	0.127	0.041	3.119	0.002	0.127	0.065
.RQ6	0.812	0.096	8.460	0.000	0.812	0.290
.SCS1	0.283	0.065	4.372	0.000	0.283	0.103
.SCS3	0.846	0.105	8.047	0.000	0.846	0.272
.SCS5	1.699	0.183	9.299	0.000	1.699	0.530
.SCS6	0.669	0.075	8.903	0.000	0.669	0.402
.EffDis1	0.534	0.070	7.602	0.000	0.534	0.345
.EffDis2	1.124	0.141	7.982	0.000	1.124	0.385
.EffDis3	0.623	0.071	8.739	0.000	0.623	0.508
.EffDis4	1.715	0.194	8.849	0.000	1.715	0.533
.SexTalk1	0.346	0.044	7.874	0.000	0.346	0.205
.SexTalk2	0.460	0.059	7.867	0.000	0.460	0.204
.SexTalk4	0.527	0.062	8.459	0.000	0.527	0.265
.SexTalk7	0.240	0.040	5.995	0.000	0.240	0.116
.PlanDis1	0.444	0.245	1.811	0.070	0.444	0.146
.PlanDis2	1.600	0.242	6.619	0.000	1.600	0.457
.SchDis1	2.108	0.224	9.423	0.000	2.108	0.794
.DisDirNVL	1.339	0.251	5.328	0.000	0.888	0.888
ASDisL	1.509	0.170	8.878	0.000	1.000	1.000
ARDisL	1.501	0.235	6.397	0.000	0.761	0.761
AODisL	0.410	0.099	4.125	0.000	0.364	0.364
RQL	0.527	0.083	6.374	0.000	1.000	1.000
SCSL	2.471	0.284	8.698	0.000	1.000	1.000
.EffDisL	0.150	0.049	3.061	0.002	0.148	0.148
.SexTalkL	0.469	0.068	6.912	0.000	0.349	0.349
.EnactmentAss	1.934	0.328	5.898	0.000	0.746	0.746

```
> fitMeasures(model_DisDirNV_Latent_fit)
```

npar	fmin	chisq	df	pvalue
92.000	2.531	981.952	503.000	0.000
baseline.chisq	baseline.df	baseline.pvalue	cfi	tli
5746.363	561.000	0.000	0.908	0.897
nnfi	rfi	nfi	pnfi	ifi
0.897	0.809	0.829	0.743	0.909
rmi	logl	unrestricted.logl	aic	bic
0.908	-9598.806	-9107.829	19381.611	19682.254
ntotal	bic2	rmsea	rmsea.ci.lower	rmsea.ci.upper
194.000	19390.817	0.070	0.064	0.077

rmsea.ci.level	rmsea.pvalue	rmsea.close.h0	rmsea.notclose.pvalue	rmsea.notclose.h0
0.900	0.000	0.050	0.005	0.080
rmr	rmr_nomean	smr	smr_bentler	smr_bentler_nomean
0.151	0.151	0.066	0.066	0.066
cmr	cmr_nomean	smr_mplus	smr_mplus_nomean	cn_05
0.068	0.068	0.066	0.066	110.902
cn_01	gfi	agfi	pgfi	mfi
115.531	0.779	0.739	0.659	0.291
ecvi				
6.010				

Model Three: Disclosed Use of Indirect-nonverbal Messages Hypothesized Model

lavaan 0.6.15 ended normally after 67 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 141

Number of observations Used Total
 190 326

Model Test User Model:

Test statistic 3907.655
 Degrees of freedom 1689
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisIndNVL =~						
DisNVInd1	1.000				0.719	0.589
DisNVInd2	1.964	0.267	7.362	0.000	1.413	0.841
DisNVInd3	1.861	0.251	7.413	0.000	1.338	0.780
EnactmentAss =~						
PlanDis1	1.000				1.515	0.872
PlanDis2	0.960	0.123	7.826	0.000	1.454	0.779
SchDis1	0.504	0.088	5.741	0.000	0.763	0.467
SexTalkL =~						
SexTalk1	1.000				1.154	0.880
SexTalk2	1.170	0.065	18.105	0.000	1.351	0.894
SexTalk3	1.031	0.092	11.201	0.000	1.190	0.682
SexTalk4	1.055	0.064	16.598	0.000	1.218	0.858
SexTalk5	0.918	0.088	10.439	0.000	1.060	0.650
SexTalk6	1.068	0.072	14.792	0.000	1.233	0.808
SexTalk7	1.171	0.058	20.039	0.000	1.352	0.934
EffDisL =~						
EffDis1	1.000				1.044	0.823
EffDis2	1.330	0.108	12.354	0.000	1.389	0.801
EffDis3	0.754	0.073	10.315	0.000	0.787	0.698
EffDis4	1.191	0.119	10.040	0.000	1.244	0.683
AODisL =~						
AODis1	1.000				1.071	0.615
AODis3	0.770	0.091	8.424	0.000	0.825	0.758
AODis4	1.235	0.134	9.240	0.000	1.322	0.873
AODis5	0.641	0.093	6.918	0.000	0.686	0.585
ARDisL =~						
ARDis1	1.000				1.281	0.740
ARDis2	0.959	0.108	8.890	0.000	1.228	0.658
ARDis3	0.597	0.080	7.509	0.000	0.765	0.560
ARDis4	0.996	0.093	10.731	0.000	1.276	0.786
ARDis5	0.861	0.090	9.558	0.000	1.103	0.705
ARDis6	1.119	0.107	10.465	0.000	1.433	0.767
ARDis7	0.656	0.073	8.986	0.000	0.841	0.665
ARDis8	0.483	0.097	5.000	0.000	0.619	0.377
ARDis9	0.794	0.106	7.513	0.000	1.018	0.560
ARDis10	0.429	0.077	5.581	0.000	0.550	0.420
ARDis11	0.641	0.088	7.269	0.000	0.821	0.543
ARDis12	0.181	0.095	1.916	0.055	0.232	0.146
SCSL =~						
SCS1	1.000				1.585	0.948
SCS2	0.526	0.079	6.698	0.000	0.834	0.453
SCS3	0.961	0.050	19.335	0.000	1.523	0.868
SCS4	0.685	0.075	9.116	0.000	1.085	0.576
SCS5	0.792	0.064	12.329	0.000	1.255	0.701
SCS6	0.628	0.043	14.497	0.000	0.995	0.765
RQL =~						
RQ1	1.000				0.737	0.789
RQ2	0.677	0.063	10.750	0.000	0.499	0.717
RQ3	1.266	0.147	8.620	0.000	0.933	0.596
RQ4	1.017	0.082	12.392	0.000	0.750	0.801
RQ5	1.799	0.116	15.494	0.000	1.327	0.942
RQ6	1.964	0.144	13.668	0.000	1.448	0.861
RQ7	1.720	0.147	11.679	0.000	1.268	0.765
RQ8	1.743	0.185	9.410	0.000	1.285	0.642
ASDisL =~						
ASDis1	1.000				1.182	0.787

ASDis2	0.949	0.078	12.178	0.000	1.122	0.786
ASDis3	0.787	0.071	11.127	0.000	0.930	0.733
ASDis4	1.057	0.082	12.888	0.000	1.248	0.821
ASDis5	1.003	0.082	12.171	0.000	1.185	0.786
ASDis6	0.632	0.066	9.528	0.000	0.746	0.645
ASDis7	0.782	0.069	11.316	0.000	0.924	0.743
ASDis8	0.407	0.048	8.460	0.000	0.481	0.583
ASDis9	0.984	0.068	14.525	0.000	1.163	0.895
ASDis10	0.874	0.060	14.628	0.000	1.032	0.899
ASDis11	0.999	0.070	14.345	0.000	1.181	0.887
ASDis12	1.040	0.075	13.884	0.000	1.229	0.867
ASDis13	1.124	0.084	13.310	0.000	1.329	0.840

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisIndNVL ~						
ARDisL	0.113	0.087	1.305	0.192	0.202	0.202
AODisL	-0.291	0.165	-1.764	0.078	-0.434	-0.434
SCSL	-0.036	0.078	-0.456	0.649	-0.078	-0.078
SexTalkL	-0.126	0.090	-1.394	0.163	-0.202	-0.202
EffDisL	0.183	0.164	1.114	0.265	0.265	0.265
EnactmentAss ~						
EffDisL	-0.391	0.121	-3.228	0.001	-0.270	-0.270
SexTalkL ~						
RQL	0.426	0.134	3.180	0.001	0.272	0.272
SCSL	0.432	0.064	6.721	0.000	0.592	0.592
EffDisL ~						
SCSL	0.116	0.058	1.990	0.047	0.176	0.176
RQL	0.403	0.127	3.179	0.001	0.284	0.284
AODisL	0.760	0.125	6.075	0.000	0.780	0.780
ASDisL	0.133	0.084	1.576	0.115	0.150	0.150
AODisL ~						
ASDisL	-0.433	0.077	-5.596	0.000	-0.478	-0.478
ARDisL	0.398	0.073	5.420	0.000	0.476	0.476
ARDisL ~						
ASDisL	-0.631	0.089	-7.068	0.000	-0.582	-0.582
SCSL	0.279	0.091	3.077	0.002	0.345	0.345
RQL	-0.290	0.193	-1.504	0.132	-0.167	-0.167

Covariances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
SCSL ~ ~						
RQL	0.919	0.124	7.408	0.000	0.787	0.787
ASDisL	-0.579	0.152	-3.798	0.000	-0.309	-0.309
RQL ~ ~						
ASDisL	-0.293	0.073	-4.006	0.000	-0.336	-0.336

Variances:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
.DisNVInd1	0.973	0.114	8.562	0.000	0.973	0.653
.DisNVInd2	0.828	0.207	3.993	0.000	0.828	0.293
.DisNVInd3	1.150	0.208	5.534	0.000	1.150	0.391
.PlanDis1	0.725	0.265	2.740	0.006	0.725	0.240
.PlanDis2	1.371	0.274	5.000	0.000	1.371	0.393
.SchDis1	2.095	0.228	9.170	0.000	2.095	0.782
.SexTalk1	0.388	0.047	8.217	0.000	0.388	0.225
.SexTalk2	0.461	0.058	7.977	0.000	0.461	0.202
.SexTalk3	1.627	0.174	9.366	0.000	1.627	0.535
.SexTalk4	0.532	0.063	8.510	0.000	0.532	0.264
.SexTalk5	1.537	0.163	9.427	0.000	1.537	0.578
.SexTalk6	0.806	0.090	8.915	0.000	0.806	0.346
.SexTalk7	0.270	0.040	6.723	0.000	0.270	0.129
.EffDis1	0.520	0.071	7.298	0.000	0.520	0.323
.EffDis2	1.075	0.140	7.666	0.000	1.075	0.358
.EffDis3	0.653	0.075	8.669	0.000	0.653	0.513
.EffDis4	1.768	0.202	8.755	0.000	1.768	0.533
.AODis1	1.884	0.206	9.138	0.000	1.884	0.622
.AODis3	0.505	0.060	8.373	0.000	0.505	0.426
.AODis4	0.545	0.086	6.324	0.000	0.545	0.238
.AODis5	0.905	0.098	9.227	0.000	0.905	0.658
.ARDis1	1.358	0.159	8.551	0.000	1.358	0.453
.ARDis2	1.977	0.220	8.993	0.000	1.977	0.567
.ARDis3	1.281	0.138	9.297	0.000	1.281	0.686
.ARDis4	1.009	0.124	8.146	0.000	1.009	0.383
.ARDis5	1.233	0.141	8.772	0.000	1.233	0.504
.ARDis6	1.434	0.172	8.327	0.000	1.434	0.411
.ARDis7	0.894	0.100	8.965	0.000	0.894	0.558
.ARDis8	2.314	0.241	9.584	0.000	2.314	0.858
.ARDis9	2.264	0.243	9.296	0.000	2.264	0.686
.ARDis10	1.413	0.148	9.536	0.000	1.413	0.824
.ARDis11	1.615	0.173	9.335	0.000	1.615	0.705

.ARDis12	2.489	0.256	9.726	0.000	2.489	0.979
.SCS1	0.285	0.061	4.707	0.000	0.285	0.102
.SCS2	2.689	0.280	9.604	0.000	2.689	0.794
.SCS3	0.758	0.096	7.891	0.000	0.758	0.246
.SCS4	2.376	0.251	9.471	0.000	2.376	0.669
.SCS5	1.630	0.177	9.202	0.000	1.630	0.509
.SCS6	0.700	0.078	8.937	0.000	0.700	0.414
.RQ1	0.330	0.037	8.923	0.000	0.330	0.378
.RQ2	0.236	0.026	9.223	0.000	0.236	0.487
.RQ3	1.583	0.167	9.476	0.000	1.583	0.645
.RQ4	0.315	0.036	8.852	0.000	0.315	0.359
.RQ5	0.223	0.038	5.794	0.000	0.223	0.112
.RQ6	0.732	0.088	8.292	0.000	0.732	0.259
.RQ7	1.138	0.126	9.043	0.000	1.138	0.415
.RQ8	2.355	0.251	9.400	0.000	2.355	0.588
.ASDis1	0.860	0.093	9.201	0.000	0.860	0.381
.ASDis2	0.777	0.084	9.203	0.000	0.777	0.382
.ASDis3	0.747	0.080	9.358	0.000	0.747	0.463
.ASDis4	0.756	0.084	9.054	0.000	0.756	0.327
.ASDis5	0.869	0.094	9.204	0.000	0.869	0.382
.ASDis6	0.781	0.082	9.508	0.000	0.781	0.584
.ASDis7	0.695	0.074	9.334	0.000	0.695	0.449
.ASDis8	0.450	0.047	9.575	0.000	0.450	0.661
.ASDis9	0.337	0.040	8.395	0.000	0.337	0.200
.ASDis10	0.253	0.030	8.324	0.000	0.253	0.192
.ASDis11	0.378	0.044	8.505	0.000	0.378	0.213
.ASDis12	0.501	0.057	8.732	0.000	0.501	0.249
.ASDis13	0.734	0.082	8.938	0.000	0.734	0.294
.DisIndNVL	0.416	0.106	3.939	0.000	0.804	0.804
.EnactmentAss	2.128	0.373	5.708	0.000	0.927	0.927
.SexTalkL	0.429	0.063	6.801	0.000	0.322	0.322
.EffDisL	0.196	0.055	3.549	0.000	0.180	0.180
.AODisL	0.296	0.077	3.856	0.000	0.258	0.258
.ARDisL	0.897	0.164	5.460	0.000	0.547	0.547
.SCSL	2.511	0.290	8.651	0.000	1.000	1.000
.RQL	0.544	0.084	6.449	0.000	1.000	1.000
.ASDisL	1.396	0.216	6.458	0.000	1.000	1.000

```
> fitMeasures(model_DisIndNV_Latent_fit)
      npar      fmin      chisq      df      pvalue
141.000    10.283    3907.655    1689.000    0.000
baseline.chisq  baseline.df  baseline.pvalue      cfi      tli
10986.956    1770.000      0.000      0.759      0.748
      nnfi      rfi      nfi      pnfi      ifi
      0.748      0.627      0.644      0.615      0.761
      rmi      logl  unrestricted.logl      aic      bic
      0.759    -16954.376    -15000.549    34190.753    34648.583
ntotal      bic2      rmsea      rmsea.ci.lower  rmsea.ci.upper
190.000    34201.954      0.083      0.080      0.087
rmsea.ci.level  rmsea.pvalue  rmsea.close.h0  rmsea.notclose.pvalue  rmsea.notclose.h0
      0.900      0.000      0.050      0.936      0.080
      rmr      rmr_nomean      smmr      smmr_bentler  smmr_bentler_nomean
      0.210      0.210      0.093      0.093      0.093
      cmrm      cmrm_nomean      smmr_mplus      smmr_mplus_nomean      cn_05
      0.094      0.094      0.093      0.093      87.826
      cn_01      gfi      agfi      pgfi      mfi
      89.840      0.586      0.552      0.541      0.003
      ecvi
      22.051
```

Model Three: Disclosed Use of Indirect-nonverbal Messages Improved Model

lavaan 0.6.15 ended normally after 70 iterations

Estimator ML
 Optimization method NLMINB
 Number of model parameters 94

Number of observations Used Total
 194 326

Model Test User Model:

Test statistic 965.611
 Degrees of freedom 501
 P-value (Chi-square) 0.000

Parameter Estimates:

Standard errors Standard
 Information Expected
 Information saturated (h1) model Structured

Latent Variables:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisIndNVL =~						
DisNVInd1	1.000				0.717	0.592
DisNVInd2	1.939	0.259	7.479	0.000	1.390	0.835
DisNVInd3	1.870	0.249	7.524	0.000	1.341	0.787
ASDisL =~						
ASDis9	1.000				1.228	0.950
ASDis10	0.899	0.029	30.832	0.000	1.104	0.966
ASDis11	0.970	0.042	23.334	0.000	1.191	0.902
ASDis12	0.939	0.053	17.673	0.000	1.154	0.820
ARDisL =~						
ARDis1	1.000				1.404	0.818
ARDis2	1.010	0.089	11.376	0.000	1.417	0.763
ARDis4	0.772	0.080	9.628	0.000	1.084	0.666
ARDis6	1.128	0.088	12.886	0.000	1.584	0.853
AODisL =~						
AODis1	1.000				1.060	0.614
AODis3	0.771	0.091	8.433	0.000	0.817	0.758
AODis4	1.241	0.135	9.186	0.000	1.315	0.869
AODis5	0.638	0.093	6.878	0.000	0.677	0.579
RQL =~						
RQ1	1.000				0.725	0.777
RQ4	1.031	0.084	12.279	0.000	0.748	0.799
RQ5	1.868	0.121	15.489	0.000	1.355	0.968
RQ6	1.946	0.148	13.139	0.000	1.411	0.842
SCSL =~						
SCS1	1.000				1.571	0.947
SCS3	0.958	0.052	18.385	0.000	1.506	0.854
SCS5	0.782	0.066	11.927	0.000	1.229	0.686
SCS6	0.635	0.043	14.800	0.000	0.998	0.773
EffDisL =~						
EffDis1	1.000				1.009	0.812
EffDis2	1.260	0.113	11.118	0.000	1.271	0.743
EffDis3	0.797	0.074	10.835	0.000	0.804	0.727
EffDis4	1.122	0.124	9.041	0.000	1.132	0.630
SexTalkL =~						
SexTalk1	1.000				1.142	0.879
SexTalk2	1.225	0.063	19.314	0.000	1.399	0.932
SexTalk4	1.041	0.063	16.613	0.000	1.189	0.843
SexTalk7	1.220	0.057	21.479	0.000	1.394	0.969
EnactmentAss =~						
PlanDis1	1.000				1.583	0.910
PlanDis2	0.881	0.099	8.920	0.000	1.396	0.746
SchDis1	0.475	0.079	5.981	0.000	0.752	0.462

Regressions:

	Estimate	Std.Err	z-value	P(> z)	Std.lv	Std.all
DisIndNVL ~						
ARDisL	0.109	0.061	1.788	0.074	0.214	0.214
AODisL	-0.220	0.177	-1.238	0.216	-0.325	-0.325
SCSL	-0.041	0.066	-0.622	0.534	-0.090	-0.090
SexTalkL	-0.096	0.107	-0.900	0.368	-0.153	-0.153
EffDisL	0.101	0.221	0.459	0.646	0.143	0.143
EnactmentAss	0.141	0.048	2.921	0.003	0.310	0.310
EnactmentAss ~						
EffDisL	0.056	0.414	0.135	0.893	0.036	0.036
AODisL	-0.776	0.306	-2.532	0.011	-0.520	-0.520
SexTalkL	0.300	0.209	1.432	0.152	0.216	0.216

```

SexTalkL ~
  RQL      0.234  0.134  1.746  0.081  0.148  0.148
  SCSL     0.482  0.067  7.233  0.000  0.663  0.663
EffDisL ~
  SCSL     0.017  0.066  0.259  0.796  0.027  0.027
  RQL      0.305  0.118  2.577  0.010  0.219  0.219
  AODisL   0.675  0.103  6.527  0.000  0.709  0.709
  ASDisL   0.076  0.063  1.209  0.227  0.093  0.093
  SexTalkL 0.313  0.071  4.378  0.000  0.354  0.354
AODisL ~
  ASDisL   -0.444  0.069  -6.442  0.000  -0.515  -0.515
  ARDisL   0.316  0.059  5.319  0.000  0.419  0.419
ARDisL ~
  ASDisL   -0.487  0.088  -5.561  0.000  -0.426  -0.426
  SCSL     0.250  0.111  2.241  0.025  0.279  0.279
  RQL      -0.301  0.240  -1.253  0.210  -0.156  -0.156

```

Covariances:

```

      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
.EffDis2 ~~
.EffDis4      0.581  0.143  4.073  0.000  0.581  0.365
.SexTalk2 ~~
.SexTalk7     -0.191  0.038  -4.986  0.000  -0.191  -0.990
ASDisL ~~
  RQL      -0.254  0.071  -3.586  0.000  -0.285  -0.285
  SCSL     -0.504  0.151  -3.346  0.001  -0.261  -0.261
RQL ~~
  SCSL     0.891  0.121  7.389  0.000  0.782  0.782

```

Variances:

```

      Estimate Std.Err z-value P(>|z|) Std.lv Std.all
.DisNVInd1  0.951  0.110  8.626  0.000  0.951  0.649
.DisNVInd2  0.842  0.201  4.190  0.000  0.842  0.303
.DisNVInd3  1.107  0.204  5.431  0.000  1.107  0.381
.ASDis9     0.162  0.026  6.344  0.000  0.162  0.097
.ASDis10    0.088  0.018  4.938  0.000  0.088  0.067
.ASDis11    0.326  0.039  8.352  0.000  0.326  0.187
.ASDis12    0.648  0.071  9.166  0.000  0.648  0.327
.ARDis1     0.977  0.138  7.064  0.000  0.977  0.331
.ARDis2     1.438  0.181  7.955  0.000  1.438  0.417
.ARDis4     1.471  0.167  8.787  0.000  1.471  0.556
.ARDis6     0.937  0.151  6.189  0.000  0.937  0.272
.AODis1     1.857  0.203  9.163  0.000  1.857  0.623
.AODis3     0.493  0.060  8.283  0.000  0.493  0.425
.AODis4     0.563  0.090  6.225  0.000  0.563  0.246
.AODis5     0.906  0.098  9.278  0.000  0.906  0.664
.RQ1        0.345  0.038  9.063  0.000  0.345  0.396
.RQ4        0.316  0.035  8.915  0.000  0.316  0.361
.RQ5        0.124  0.041  3.050  0.002  0.124  0.063
.RQ6        0.814  0.096  8.475  0.000  0.814  0.290
.SCS1       0.285  0.065  4.402  0.000  0.285  0.103
.SCS3       0.843  0.105  8.036  0.000  0.843  0.271
.SCS5       1.699  0.183  9.297  0.000  1.699  0.529
.SCS6       0.669  0.075  8.901  0.000  0.669  0.402
.EffDis1    0.527  0.071  7.386  0.000  0.527  0.341
.EffDis2    1.307  0.157  8.307  0.000  1.307  0.447
.EffDis3    0.575  0.068  8.493  0.000  0.575  0.471
.EffDis4    1.943  0.216  8.990  0.000  1.943  0.603
.SexTalk1   0.385  0.045  8.622  0.000  0.385  0.228
.SexTalk2   0.298  0.059  5.018  0.000  0.298  0.132
.SexTalk4   0.576  0.063  9.144  0.000  0.576  0.290
.SexTalk7   0.125  0.043  2.908  0.004  0.125  0.060
.PlanDis1   0.524  0.232  2.259  0.024  0.524  0.173
.PlanDis2   1.549  0.238  6.516  0.000  1.549  0.443
.SchDis1    2.088  0.223  9.380  0.000  2.088  0.787
.DisIndNVL  0.424  0.105  4.032  0.000  0.824  0.824
ASDisL      1.509  0.170  8.877  0.000  1.000  1.000
ARDisL      1.498  0.234  6.393  0.000  0.760  0.760
AODisL      0.408  0.099  4.117  0.000  0.363  0.363
RQL         0.526  0.083  6.369  0.000  1.000  1.000
SCSL        2.469  0.284  8.691  0.000  1.000  1.000
.EffDisL    0.131  0.050  2.625  0.009  0.129  0.129
.SexTalkL   0.502  0.068  7.356  0.000  0.385  0.385
.EnactmentAss 1.868  0.315  5.922  0.000  0.745  0.745

```

> fitMeasures(model_DisIndNV_Latent_fit)

```

      npar      fmin      chisq      df      pvalue
 94.000    2.489   965.611    501.000    0.000
baseline.chisq  baseline.df  baseline.pvalue  cfi      tli
5635.025    561.000      0.000    0.908    0.897
nnfi      rfi      nfi      pnfi      ifi
0.897    0.808    0.829    0.740    0.910

```

rni	logl	unrestricted.logl	aic	bic	
0.908	-9517.309	-9034.504	19222.618	19529.797	
ntotal	bic2	rmsea	rmsea.ci.lower	rmsea.ci.upper	
194.000	19232.024	0.069	0.063	0.076	
rmsea.ci.level	rmsea.pvalue	rmsea.close.h0	rmsea.notclose.pvalue	rmsea.notclose.h0	
0.900	0.000	0.050	0.003	0.080	
rnr	rnr_nomean	smr	smr_bentler	smr_bentler_nomean	
0.148	0.148	0.069	0.069	0.069	
crmr	crmr_nomean	smr_mplus	smr_mplus_nomean	cn_05	
0.071	0.071	0.069	0.069	112.340	
cn_01	gfi	agfi	pgfi	mfi	
117.038	0.783	0.743	0.659	0.302	
ecvi					
5.946					

References

- Afifi, T., & Steuber, K. (2009). The revelation risk model (RRM): Factors that predict the revelation of secrets and the strategies used to reveal them. *Communication Monographs*, 76, 144–176. <https://www.doi.org/10.1080/03637750902828412>
- Afifi, W. A., & Guerrero, L. K. (1998). Some things are better left unsaid II: Topic avoidance in friendships. *Communication Quarterly*, 46, 231–250. <https://www.doi.org/10.1080/01463379809370099>
- Afifi, W. A., & Guerrero, L. K. (2000). Motivations underlying topic avoidance in close relationships. In S. S. Petronio (Ed.), *Balancing the secrets of private disclosures* (165–180). Lawrence Erlbaum Associates.
- Allen, J. G. (1974). When does exchanging personal information constitute self-disclosure? *Psychological Reports*, 35, 195–198. <https://www.doi.org/10.2466/pr0.1974.35.1.195>
- Altman, I., & Taylor, D. (1973). *Social penetration: The development of interpersonal relationships*. Holt, Rinehart & Winston.
- Anderson, M. (2011). *Sexual communication in romantic relationships: An investigation into the disclosure of sexual fantasies* (Publication No. 3489846) [Doctoral dissertation, University of Kansas]. KU Scholar Works. <https://tinyurl.com/8yn7ntc>.
- Anderson, M., Kunkel, A., & Dennis, M. R. (2011). “Let’s (not) talk about that”: Bridging the past sexual experiences taboo to build healthy relationships. *Journal of Sex Research*, 48(4), 381–391. <https://doi.org/10.1080/00224499.2010.482215>
- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research*, 1, 99–112. <https://www.doi.org/10.1111/j.1468-2958.1975.tb00258.x>

- Bezreh, T., Weinberg, T. S., Edgar, T. (2012). BDSM disclosure and stigma management: Identifying opportunity for sex education. *American Journal of Sexuality Education*, 7, 37-61. <https://doi.org/10.1080/15546128.2012.650984>
- Brohan, E., Henderson, C., Wheat, K., Malcolm, E., Clement, S., Barley, E. A., Slade, M., & Thornicroft, G. (2012). Systematic review of beliefs, behaviours and influencing factors associated with disclosure of a mental health problem in the workplace. *BMC Psychiatry*, 12(11), 1-14. <https://www.doi.org/10.1186/1471-244x-12-11>
- Brown, R. D., & Weigel, D. J. (2018). Exploring a contextual model of sexual self-disclosure and sexual satisfaction. *The Journal of Sex Research*, 55(2), 202-213. <https://doi.org/10.1080/00224499.2017.1295299>
- Brown, T. O. L. (2010). *"If someone finds out you're a perv: " The experience and management of stigma in the BDSM subculture*. [Master's Thesis, Ohio University]. OhioLINK. https://etd.ohiolink.edu/apexprod/rws_olink/r/1501/10?clear=10&p10_accession_num=ohiou1279225927#abstract-files
- Burgoon, J. K., Manusov, V., & Guerrero, L. K. (2022). *Nonverbal communication* (2nd ed.). Routledge.
- Byers, E. S. (2011). Beyond the birds and the bees and was it good for you?: Thirty years of research on sexual communication. *Canadian Psychology/Psychologie Canadienne*, 52, 20. <https://doi.org/10.1037/a0022048>
- Byers, E. S., & Demmons, S. (1999). Sexual satisfaction and sexual self-disclosure within dating relationships. *Journal of Sex Research*, 36(2), 180-189. <https://www.jstor.org/stable/3813212>

- Byers, E. S., Demmons, S., & Lawrance, K. A. (1998). Sexual satisfaction within dating relationships: A test of the interpersonal exchange model of sexual satisfaction. *Journal of Social and Personal Relationships, 15*(2), 257-267.
- Byers, E. S., & MacNeil, S. (1997). The relationships between sexual problems, communication, and sexual satisfaction. *The Canadian Journal of Human Sexuality, 6*(4), 277.
- Byers, E. S., Demmons, S., & Lawrance, K. A. (1998). Sexual satisfaction within dating relationships: A test of the interpersonal exchange model of sexual satisfaction. *Journal of Social and Personal Relationships, 15*(2), 257-267.
- Byers, E. S., & Demmons, S. (1999). Sexual satisfaction and sexual self-disclosure within dating relationships. *Journal of Sex Research, 36*(2), 180-189.
- Cameron, J. J., Holmes, J. G., & Vorauer, J. D. (2009). When self-disclosure goes awry: Negative consequences of revealing personal failures for lower self-esteem individuals. *Journal of Experimental Social Psychology, 45*, 217-222.
<http://doi.org/10.1016/j.jesp.2008.09.009>
- Carmack, C., Roncancio, A. M., Gerecht, L., & Ansari, M. (2020). Perceived partner beliefs about condoms and self-efficacy communication within the context of the theory of gender and power. *Journal of Community Psychology, 48*, 1424-1437.
<http://doi.org/10.1002/jcop.22337>
- Catona, D., Greene, K., & Magsamen-Conrad, K. (2015). Perceived benefits and drawbacks of disclosure practices: An analysis of PLWHA's strategies for disclosing HIV status. *Journal of Health Communication, 20*. 1294-1301.
<https://doi.org/10.1080/10810730.2015.1018640>

- Chaikin, A. L., & Derlega, V. J. (1974). Variables affecting the appropriateness of self-disclosure. *Journal of Consulting and Clinical Psychology, 42*(4), 588-593.
- Checton, M. G., & Greene, K. (2012). Beyond initial disclosure: The role of prognosis and symptom uncertainty in patterns of disclosure in relationships. *Health Communication, 27*, 145–157. <https://www.doi.org/10.1080/10410236.2011.571755>
- Cheung, C. M. K., Lee, Z. W. Y., & Chan, T. K. J. H. (2014). Self-disclosure in social networking sites: The role of perceived cost, perceived benefits and social influence. *Internet Research, 25*(2), 279-299. <https://doi.org/10.1108/instr-09-2013-0192>
- Choi, S. Y., Venetis, M. K., Greene, K., Magsamen-Conrad, K., Checton, M. G., & Banerjee, S. C. (2016). Planning a stigmatized nonvisible illness disclosure: Applying the disclosure decision-making model. *The Journal of Psychology, 150*(8), 1004-1025. <https://doi.org/10.1080/00223980.2016.1226742>
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology, 37*, 12-24.
- Coffelt, T. A., & Hess, J. A. (2014). Sexual disclosures: Connections to relational satisfaction and closeness. *Journal of Sex & Marital Therapy, 40*(6), 577-591. <https://doi.org/10.1080/0092623X.2013.811449>
- Coffelt, T. A., & Hess, J. A. (2015). Sexual goals-plans-actions: Towards a sexual script in marriage. *Communication Quarterly, 63*(2), 221-238. <https://www.doi.org/10.1080/01463373.2015.1012216>
- Cohen, B. H. (2008). *Explaining psychological statistics* (3rd ed.). Wiley.
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin, 116*(5), 457-475.

- Colson, M.H., Lemaire, A., Pinton, P., Hamidi, K., & Klein, P. (2006). Sexual behaviors and mental perception, satisfaction and expectations of sex life in men and women in France. *Journal of Sex and Medicine, 3*, 121131. <https://www.doi.org/10.1111/j.1743-6109.2005.00166.x>
- Cozby, P. C. (1972). Self-disclosure, reciprocity, and liking. *Sociometry, 35*, 151-160.
- Cranmer, G. A., & LaBelle, S. (2018). Using the disclosure decision-making model to understand high school football players' disclosures of concussion symptoms. *International Journal of Sport Communication, 11*, 241–260. <https://doi.org/10.1123/ijsc.2017-0120>
- Critelli, J. W., & Dupre, K. M. (1978). Self-disclosure and romantic attraction. *The Journal of Social Psychology, 106*, 127-128
- Culbert, S. A. (1970). The interpersonal process of self-disclosure: It takes two to see one. In R. L. Gohembiewski & A. Blumberg (Eds.), *Sensitivity training and the laboratory approach*. F. E. Peacock.
- Cunningham, S. D., Tschann, J., Gurvey, J. E., & Ellen, J. M. (2002). Attitudes about sexual disclosure and perceptions of stigma and shame. *Sexually Transmitted Infections, 78*(5), 334-338.
- Cupach, W. R., & Comstock, J. (1990). Satisfaction with sexual communication in marriage: Links to sexual satisfaction and dyadic adjustment. *Journal of Social and Personal Relationships, 7*, 179-186.
- Cupach, W. R., & Metts, S. (1991). Sexuality and communication in close relationships. In K. McKinney & S. Sprecher (Eds.), *Sexuality in close relationships* (pp. 93–110). Erlbaum.

- Day, L. C., Muise, A., Joel, S., & Impett, E. A. (2015). To do it or not to do it? How communally motivated people navigate sexual interdependence dilemmas. *Personality and Social Psychology Bulletin*, 4(6), 791-804. <https://doi.org/10.1177/0146167215580129>
- Dean, M., & Rauscher, E. A. (2018). Men's and women's approaches to disclosure about BRCA-related cancer risks and family planning decision-making. *Qualitative Health Research*, 28, 2155–2168. <https://doi.org/10.1177/1049732318788377>
- Denes, A. (2012). Pillow talk: Exploring disclosures after sexual activity. *Western Journal of Communication*, 72(2), 91-108. <https://doi.org/10.1080/10570314.2011.651253>
- Denes, A., & Afifi, T. D. (2014). Pillow talk and cognitive decision-making processes: Exploring the influence of orgasm and alcohol on communication after sexual activity. *Communication Monographs*, 81(3) 333-358. <https://www.doi.org/10.1080/03637751.2014.926377>
- Denes, A., Crowley, J. P., & Bennett, M. (2020). Between the sheets: Investigating young adults' communication during sexual activity. *Personal Relationships*, 27(2), 484-501. <https://doi.org/10.1111/per.12324>
- Derlega, V. J., & Grzelak, J. (1979). Appropriateness of self-disclosure. In G. Chelune (Ed.), *Self-disclosure: Origins, patterns, and implications of openness in interpersonal relationships* (pp. 151-176). Jossey-Bass.
- Derlega, V. J., Metts, S., Petronio, S., & Margulis, S. T. (1993). *Self-disclosure*. SAGE.
- Derlega V. J., Winstead, B. A., Greene K. (2008). Self-disclosure and starting a close relationship. In S. Sprecher, A. Wenzel, & J. Harvey (Eds.), *Handbook of relationship initiation* (pp. 153-174). Psychology Press.

- Derlega, V. J., Winstead, B. A., Greene, K., Serovich, J., & Elwood, W. N. (2004). Reasons for HIV disclosure/nondisclosure in close relationships: Testing a model of HIV-disclosure decision making. *Journal of Social & Clinical Psychology, 23*, 747–767.
- Edgar, T., & Fitzpatrick, M. A. (1993). Expectations for sexual interaction: A cognitive test of the sequencing of sexual communication behaviors. *Health Communication, 5*(4), 239-261.
- Evangelini, M., & Wroe, A. L. (2017). HIV disclosure anxiety: A systematic review and theoretical synthesis. *AIDS and Behavior, 21*, 1-11. <https://www.doi.org/10.1007/s10461-016-1453-3>
- Farber, B. A., & Hall, D. (2002). Disclosure to therapists: What is and is not discussed in psychotherapy. *Journal of Clinical Psychology, 58*(4), 359-370.
<https://www.doi.org/10.1002/jclp.1148>
- Fisher, D. V. (1986). Decision-making and self-disclosure. *Journal of Social and Personal Relationships, 3*, 323-336.
- Fisher, N., & Choi, S. I. (2013). What are college students afraid of disclosing and to whom? An adaptation and extension of the Self-Disclosure Index. *Journal of Asia Pacific Counseling, 3*, 113–130.
- Friley, B. L., & Venetis, M. K. (2021). Decision-making criteria when contemplating disclosure of transgender identity to medical providers. *Health Communication*.
<https://www.doi.org/10.1080/10410236.2021.1885774>
- Gerbing, D. W., & Anderson, J. C. (1992). Monte Carlo evaluations of goodness of fit indices for structural equation models. *Sociological Methods and Research, 21*(2), 132-160.
<https://www.doi.org/10.1177/0049124192021002002>

- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Simon & Schuster.
- Golish, T. D., & Caughlin, J. P. (2002). "I'd rather not talk about it": Adolescents' and young adults' use of topic avoidance in stepfamilies. *Journal of Applied Communication Research, 30*, 78–106. <https://www.doi.org/10.1080/00909880216574>
- Goodboy, A. K., Myers, S. A., & members of Investigating Communication. (2010). Relational quality indicators and love styles as predictors of negative relational maintenance behaviors in romantic relationships. *Communication Reports, 23*(2), 65-78. <https://www.doi.org/10.1080/08934215.2010.511397>
- Goodstein, L. D., & Reinecker, V. M. (1974). Factors affecting self-disclosure: A review of the literature. In B. A. Maher (Ed.), *Progress in experimental personality research* (Vol. 7) (pp. 49-77). Academic Press.
- Gossman, I., Julien, D., Mathieu, M., & Chartrand, E. (2002). The sexual initiation scale: Development and initial validation. *The Canadian Journal of Human Sexuality, 11*, 133-142.
- Greene, K. (2009). An integrated model for health disclosure decision-making. In T. D. Afifi & W. A. Afifi (Eds.), *Uncertainty, information management, and disclosure decisions: Theories and applications* (pp. 226-253). Routledge.
- Greene, K., Derlega, V. J., & Matthews, A. (2006). Self-disclosure in personal relationships. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 409-427). Cambridge University Press.
- Greene, K., & Faulkner, S. L. (2002). Expected versus actual responses to disclosure in relationships of HIV-positive African-American adolescent females. *Communication Studies, 53*, 297–317. <https://doi.org/10.1080/10510970209388595>

- Greene, K., Magsamen-Conrad, K., Venetis, M. K., Checton, M. G., Bagdasarov, Z., & Banerjee, S. C. (2012). Assessing health diagnosis disclosure decisions in relationships: Testing the disclosure decision-making model. *Health Communication, 27*, 356-368. <https://doi.org/10.1080/10410236.2011.586988>
- Greer, A. E., & Buss, D. M. (1994). Tactics for promoting sexual encounters. *Journal of Sex Research, 31*(3), 185-201. <https://www.doi.org/10.1080/00224499409551752>
- Guerrero, L. K., & Afifi, W. A. (1995). Some things are better left unsaid: Topic avoidance in family relationships. *Communication Quarterly, 43*(3), 276-296.
- Gunning, J. N., Cooke-Jackson, A., & Rubinsky, V. (2020). Negotiating shame, silence, abstinence, and period sex: Women's shift from harmful memorable messages about reproductive and sexual health. *American Journal of Sexuality Education, 15*, 111-137. <https://www.doi.org/10.1080/15546128.2019.1669511>
- Haines, N., Kvam, P. D., Irving, L. H., Smith, C., Beauchaine, T. P., Pitt, M. A., Ahn, W-Y., & Turner, B. M. (2020). Theoretically informed generative models can advance the psychological and brain sciences: Lessons from the reliability paradox. *PsyArXiv*. <https://doi.org/10.31234/osf.io/xr7y3>
- Hall, J. A. (2016). Interpreting social-sexual communication: Relational framing theory and social-sexual communication, attraction, and intent. *Human Communication Research, 42*, 138-164. <https://doi.org/10.1111/hcre.12071>
- Hancock, G. R., & Mueller, R. O. (2011). The reliability paradox in assessing structural relations within covariance structure models. *Educational and Psychological Measurement, 71*(2), 306-324. <https://www.doi.org/10.1177/0013166410384856>

- Harris, S. (2009). *Spicing up the bedroom: Understanding communication messages for initiating new sexual behavior* [Unpublished doctoral dissertation]. University of Georgia.
- Harris, S., Monahan, J. L., & Hovick, S. R. (2014). Communicating new sexual desires and the factors that influence message directness. *Sexual and Relationship Therapy, 29*(4), 405-423. <https://doi.org/10.1080/14681994.2014.954992>
- Hastings, S. O. (2000). Self-disclosure and identity management by bereaved parents. *Communication Studies, 51*(4), 352-371.
- Haavio-Mannila, E., & Kontula, O. (1997). Correlates of increased sexual satisfaction. *Archives of Sexual Behavior, 26*, 399-419. <https://doi.org/10.1023/A:1024591318836>
- Hedge, C., Powell, G., & Sumner, P. (2018). The reliability paradox: Why robust cognitive tasks do not produce reliable individual differences. *Behavioral Research, 50*, 1166-1186. <https://doi.org/10.3758/s13428-017-0935-1>
- Horan, S. M. (2016). Further understanding sexual communication: Honesty, deception, safety, and risk. *Journal of Social and Personal Relationships, 33*(4), 449-468. <https://www.doi.org/10.1177/0265407515578821>
- Huberle, D. F. (1991). The role of assertiveness in female sexuality: A comparative study between sexually assertive and sexually nonassertive women. *Journal of Sex and Marital Therapy, 17*, 183-190. <https://www.doi.org/10.1080/00926239108404342>
- Humphreys, T., & Newby, J. (2007). Initiating new sexual behaviours in heterosexual relationships. *The Canadian Journal of Human Sexuality, 16*, 77-88.

- Hunt, N. C., & Scheetz, A. M. (2019). Using MTurk to distribute a survey or experiment: Methodological considerations. *Journal of Information Systems, 33*, 43-65.
<https://doi.org/10.2308/isys-52021>
- Impett, E. A., Muise, A., & Harasymchuk, C. (2019). Giving in the bedroom: The costs and benefits of responding to a partner's sexual needs in daily life. *Journal of Social and Personal Relationships, 36*(8), 2455-2473. <https://doi.org/10.1177/0265407518787349>
- Jaspal R., & Cinnirella, M. (2012). Identity processes, threat, and interpersonal relations: Accounts from British Muslim gay men. *Journal of Homosexuality, 59*, 215-240.
<https://www.doi.org/10.1080/00918369.2012.638551>
- Keith, M. G., Stevenor, B. A., & McAbee, S. T. (2023). Scale means and variance differences in MTurk and Non-MTurk samples. *Journal of Personal Psychology, 22*, 1-12.
<https://doi.org/10.1027/1866-5888/a000309>
- Kessler, R. C., Michelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior, 40*(3), 208-230.
- King, B. M., Duncan, L. M., Clinkenbeard, K. M., Rutland, M. B., & Ryan, K. M. (2019). Social desirability and young men's self-reports of penis size. *Journal of Sex & Marital Therapy, 45*(5), 452-455. <https://doi.org/10.0180/0092623X.2018.1533905>
- Knobloch, L. K., & Carpenter-Theune, K. E. (2004). Topic avoidance in developing romantic relationships. *Communication Research, 31*, 173-205.
- Kuchenbecker, C. M., & Bevan, J. L. (2023). Let's talk about death: Applying the disclosure decision-making model to death planning disclosure. *Health Communication*.
<https://doi.org/10.1080/10410236.2023.2212132>

- Laurenceau, J., Barre, L. F., & Pietromonaco, P. R. (1998). Intimacy as an interpersonal process: The importance of self-disclosure, partner disclosure, and perceived partner responsiveness in interpersonal exchanges. *Journal of Personality and Social Psychology, 74*(5), 1238-1251.
- Lee, L. L., & Greene, K. (2023). Disclosure decision-making model. In E. Ho, C. Bylund, & J. van Weert (Eds.), *The international encyclopedia of health communication*. John Wiley & Sons, Inc.
- Levin, R. J. (2006). Vocalised sounds and human sex. *Sexual and Relationship Therapy, 21*, 99-107.
- Levine, T. R., & Mongeau, P. A. (2011). Friends with benefits: A precarious negotiation. In M. Bruce & R. M. Stewart (Eds.), *College sex-philosophy for everyone: Philosophers with benefits* (pp. 91-102). Wiley/Blackwell.
- Lewis, M. (1995). *Shame: The exposed self*. Free Press.
- Littlejohn, S., & Foss, K. (2008). *Theories of communication* (9th ed.). Wadsworth.
- Love, H. A., LeFebvre, L. E., & Pederson, J. R. (2021). Disclosure and nondisclosure of suicidality to romantic partners: Understanding the decision-making process. *Journal of Social and Personal Relationships, 38*(9), 2421-2441.
<https://doi.org/10.1177/02654075211008996>
- MacNeil, S., & Byers, E. S. (2005). Dyadic assessment of sexual self-disclosure and sexual satisfaction in heterosexual dating couples. *Journal of Social and Personal Relationships, 22*(2), 169-181. <https://doi.org/10.1177/0265407505050942>

- MacNeil, S., & Byers, E. S. (2009). Role of sexual self-disclosure in the sexual satisfaction of long-term heterosexual couples. *Journal of Sex Research, 46*(1), 3-14.
<https://doi.org/10.1080/00224490802398399>
- Magsamen-Conrad, K. (2012). *Sharing personal information in relationships: The implications of anticipated response for information management theory and measurement* [Doctoral dissertation, Rutgers University]. ProQuest Dissertations & These Global.
- Mak, W. W. S. & Cheung, R. Y. M. (2008). Affiliate stigma among caregivers of people with intellectual disability or mental illness. *Journal of Applied Research in Intellectual Disabilities, 21*(6), 532-545. <https://doi.org/10.1111/j.1468-3148.2008.00426.x>
- Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Reviews of Psychology, 56*, 393-421. <https://doi.org/10.1146/annurev.psych.56.091103.070137>
- Mallory, A. B. (2022). Dimensions of couples' sexual communication, relationship satisfaction, and sexual satisfaction: A meta-analysis. *Journal of Family Psychology, 36*(3), 358-371.
<https://doi.org/10.1037/fam00f00946>
- Manning, J. (2013). Interpretive theorizing in the seductive world of sexuality and interpersonal communication: Getting guerilla with studies of sexting and purity rings. *International Journal of Communication, 7*, 2507-2520.
<https://ijoc.org/index.php/ijoc/article/download/2250/1023>
- Manning, J. (2014). A constitutive approach to interpersonal communication studies. *Communication Studies, 65*(4), 432-440. <https://doi.org/10.1080/10510974.2014.927294>
- Manning, J. (2021). Communication studies about sex: Implication for relationships, health, culture, and identity. A review. *Profesional de la Información, 30*, 1-28.
<https://doi.org/10.3145/epi.2021.ene.14>

- Manusov, V. (2016). Nonverbal communication. In R. T. Craig, J. Pooley, & E. Rothenbuhler (Eds.), *International encyclopedia of communication theory and philosophy*. Wiley-Blackwell and the International Communication Association.
- Manusov, V., & Harvey, J. (2011). Bumps and tears on the road to the presidency: Media framing of key nonverbal events in the 2008 democratic election. *Western Journal of Communication, 75*(3), 282-303. <https://doi.org/10.1080/10570314.2011.571650>
- Masaviru, M. (2016). Self-disclosure: Theories and model review. *Journal of Culture, Society, and Development, 18*, 43-47.
- McDonald, R. P., & Ho, M. R. (2002). Principles and practice in reporting structural equation analyses. *Psychological Methods, 7*, 64-82. <https://doi.org/10.1037/1082-989x.7.1.64>
- Merwin, K. E., O'Sullivan, L. F., & Rosen, N. F. (2017). We need to talk: Disclosure of sexual problems is associated with depression, sexual functioning, and relationship satisfaction in women. *Journal of Sex & Marital Therapy, 43*(8), 786-800. <https://doi.org/10.1080/0092623X.2017.1283378>
- Metts, S., & Cupach, W. R. (1989). Situational influence on the use of remedial strategies in embarrassing predicaments. *Communications Monographs, 56*(2), 151-162.
- Metts, S., Sprecher, S., & Cupach, W.S. (1991). Retrospective self-reports. In B. M. Montgomery & S. Duck (Eds.), *Studying interpersonal interaction* (pp. 162-178). Guilford Press.
- Montoya, A. K., & Edwards, M. C. (2020). Selecting number of factors in exploratory factor analysis for scale evaluation. *Educational and Psychological Measurement, 81*(3) 413-440. <https://www.doi.org/10.1177/0013164420942899>

- Montesi, J. L., Conner, B. T., Gordon, E. A., Fauber, R. L., Kim, K. H., & Heimberg, R. G. (2013). On the relationship among social anxiety, intimacy, sexual communication, and sexual satisfaction in young couples. *Archives of Sexual Behavior, 42*, 81-91.
<https://doi.org/10.1007/s10508-012-9929-3>
- Montesi, J. L., Fauber, R. L., & Gordon, E. A., & Heimberg, R. G. (2010). The specific importance of communicating about sex to couples' sexual and overall relationship satisfaction. *Journal of Social and Personal Relationships, 28*(5), 591-609.
<https://doi.org/10.1177/0265407510386833>
- Motley, M. T., & Reeder, H. M. (1995). Unwanted escalation of sexual intimacy: Male and female perceptions of connotations and relational consequences of resistance messages. *Communication Monographs, 62*, 355-389.
- Muehlenhard, C. L., & McCoy, M. L. (1991). Double standard/double bind: The sexual double standard and women's communication about sex. *Psychology of Women Quarterly, 15*, 447-461.
- Muise, A., & Impett, E. A. (2015). Good, giving, and game: The relationship benefits of communal sexual motivation. *Social Psychology and Personality Science, 6*(2), 164-172.
<https://www.doi.org/10.1177/1948550614553641>
- Muise, A., Impett, E. A., Kogan, A., & Desmarais, S. (2012). Keeping the spark alive: Being motivated to meet a partner's sexual needs sustains sexual desire in long-term romantic relationships. *Social Psychology and Personality Science, 4*(3), 267-273.
<https://www.doi.org/10.1177/1948550612457185>

- Murray, S. L., Holmes, J. G., & Collins, N. L. (2006). Optimizing assurance: The risk regulation system in relationship. *Psychological Bulletin*, *132*, 641–666.
<http://doi.org/10.1037/0033-2909.132.5.641>
- Newell, S. E., & Stutman, R. K. (1991). The episodic nature of social confrontation. In J. Anderson (Eds.). *Communication Yearbook 14* (pp. 359-413). Thousand Oaks, CA: Sage.
- Noland, C. M. (2010). *Sex talk: The role of communication in intimate relationships*. Westport: Praeger.
- Pahwa, R., Fulginiti, A., Brekke, J. S., Rice, E. (2017). Mental illness disclosure decision making. *American Journal of Orthopsychiatry*, *87*(5), 575-584.
<https://doi.org/10.1037/ort0000250>
- Park, S., Yang, F., Hayden, M., & Morel, A. (2023). Testing the disclosure decision-making model: Disclosing birth control status among college women. *Communication Quarterly*, *71*, 86-106. <https://doi.org/10.1080/01463373.2022.2112724>
- Parker, K. A., & Ivanov, B. (2013). Why not communicate? Young women’s reflection on their lack of communication with sexual partners regarding sex and contraception. *International Journal of Health, Wellness, and Society*, *2*(4), 93-109.
<https://doi.org/10.18848/2156-8960/GCP/v02i04/41023>
- Pavlov, G., Maudeu-Olivares, A., & Shi, D. (2020). Using the standardized roots mean squared residual (SRMR) to assess exact fit in structural equation models. *Educational and Psychological Measurement*, *81*, 110-130. <https://doi.org/10.1177/0013164420926231>
- Peugh, J., & Feldon, D. F. “How well does your structural equation model fit your data?”: Is Macoulides and Yuan’s equivalence test the answer? *CBE – Life Sciences Education*, *19*(3), 1-8.

- Pennington, N. (2020). An examination of relational maintenance and dissolution through social networking sites. *Computers in Human Behavior, 105*, 1-8.
<https://doi.org/10.1016/j.chb.2019.106196>
- Petronio, S. (2002). Overview of communication privacy management. In S. Petronio & I. Altman (Eds.), *Boundaries of privacy: dialectics of disclosure* (pp. 1-36). State University of New York Press.
- Pitagora, D. A. (2019). Pleasure, power, or both? Heteronormativity, stigma, and the intersections of BDSM and anoreceptive heterosexual males. *Journal of Humanistic Psychology, 1-23*. <https://doi.org/10.1177/0022167819882148>
- Plummer, K. (1975). *Sexual stigma: An interactionist account*. Routledge & Kegan Paul.
- Quina, K., Harlow, L. L., Morokoff, P. J., Burkholder, G., & Deiter, P. J. (2000). Sexual communication in relationships: When words speak louder than actions. *Sex Roles, 42*, 523-549. <https://www.doi.org/10.1023/A:1007043205155>
- Quinn, D. M., & Chaudoir, S. R. (2009). Living with a concealable stigmatized identity: The impact of anticipated stigma, centrality, salience, and cultural stigma on psychological distress and health. *Journal of Personality and Social Psychology, 97*(4), 634-651.
<https://doi.org/10.1037/a0015815>
- Rehman, U. S., Balan, D., Sutherland, S., & McNeil, J. (2019). Understanding barriers to sexual communication. *Journal of Social and Personal Relationships, 36*(9), 2605-2623.
<https://www.doi.org/10.1177/0265407518794900>
- Rehman, U. S., Rellini, A. H., & Fallis, E. (2011). The importance of sexual self-disclosure to sexual satisfaction and functioning in committed relationships. *The Journal of Sexual Medicine, 8*, 3108-3115. <https://doi.org/10.1111/j.1743-6109.2011.02439.x>

- Reiss, I. L. (1986). A sociological journey into sexuality. *Journal of Marriage and Family*, 48(2), 233-242.
- Ritsher, J. B., & Phelan, J. C. (2004). Internalized stigma predicts erosion of morale among psychiatric outpatients. *Psychiatry Research*, 129, 257-265.
<https://doi.org/10.1016/j.psychres.2004.08.003>
- Rosenfeld, L. B., & Civikly, J. M. (1976). *With words unspoken: The nonverbal experience*. Holt, Rinehart, and Winston.
- Rosenfeld, L. B., & Kendrick, L. (1984). Choosing to be open: An empirical investigation of subjective reasons for self-disclosing. *The Western Journal of Speech Communication*, 48, 326-343.
- Rubin, Z., Hill, C. T., Peplau, L. A., & Dunkel-Schetter, C. (1980). Self-disclosure in dating couples: The ethic of openness. *Journal of Marriage and Family*, 42, 305-317.
- Rubinsky, V., & Hosek, A. (2020). "We have to get over it": Navigating sex talk through the lens of sexual communication comfort and sexual self-disclosure in LGBTQ intimate partnerships. *Sexuality & Culture*, 24, 613-629. <https://doi.org/10.1007/s12119-019-09652-0>
- Scheinfeld, E. (2023). The role of shame, stigma, and family communication patterns in the decision to disclose STIs to parents in order to seek support. *International Journal of Environmental Research and Public Health*, 20, 4742-4754.
<https://doi.org/10.3390/ijerph20064742>
- Schumacker, E., & Lomax, G. (2016). *A beginners guide to structural equation modeling* (4th ed.). Routledge.

- Sheperis, D. S., Sheperis, C. J., Davis, R. J., & Mohr, D. (2017). The interpersonal risk awareness survey: Understanding the risk of self-disclosure. *Journal of Humanistic Counseling, 56*, 18-31. <https://www.doi.org/10.1002/johc.12042>
- Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of Sexual behavior, 15*, 97-120. <https://doi.org/10.1007/BF01542219>
- Simon, W., & Gagnon, J. H. (2003). Sexual scripts: Origins, influences, and changes. *Qualitative Sociology, 26*, 491-497.
- Sivo, S. A., Fan, X., Witta, E. L., & Willse, J. T. (2006). The search for “optimal” cutoff properties: Fit index criteria in structural equation modeling. *The Journal of Experimental Education, 74*(3). 267-288.
- Sneed, C. D. (2008). Parent-adolescent communication about sex: The impact of content and comfort on adolescent sexual behavior. *Journal of HIV/AIDS Prevention in Children & Youth, 9*(1), 70–83. <https://doi.org/10.1080/10698370802126477>
- Spitzberg, B. H., & Cupach, W. R. (2007). Disentangling the dark side of interpersonal communication. In B. H. Spitzberg & W. R. Cupach (Eds.), *The dark side of interpersonal communication* (2nd ed; pp. 3–28). Erlbaum.
- Sprecher, S., & Hendrick, S. S. (2004). Self-disclosure in intimate relationships: Associations with individual and relationship characteristics over time. *Journal of Social and Clinical Psychology, 23*(6), 857-877.
- Steuber, K. R., & Solomon, D. H. (2011). Factors that predict married partners’ disclosure about infertility to social network members. *Journal of Applied Communication Research, 3*, 250–270. <https://doi.org/10.1080/00909882.2011.585401>

- Theiss, J. A. (2011). Modeling dyadic effects in the associations between relational uncertainty, sexual communication, and sexual satisfaction for husbands and wives. *Communication Research, 38*, 565-584. <https://doi.org/10.1177/0093650211402186>
- Theiss, J. A., & Estlein, R. (2014). Antecedents and consequences of the perceived threat of sexual communication: A test of the relational turbulence model. *Western Journal of Communication, 78*, 404-425. <https://doi.org/10.1080/10570314.2013.845794>
- Theiss, J. A., & Solomon, D. H. (2007). Communication and the emotional, cognitive, and relational consequences of first sexual encounters between partners. *Communication Quarterly, 55*, 179–206. doi:10.1080=01463370601036663
- Tilton-Weaver, L. C., Marshall, S. K., & Darling, N. (2013). What’s in a name? Distinguishing between routine disclosure and self-disclosure. *Journal of Research on Adolescence, 24*(4), 551-563. <http://doi.org/10.1111/jora.12090>
- Tomarken, A. J., & Waller, N. G. (2003). Potential problems with “well-fitting” models. *Journal of Abnormal Psychology, 112*, 578-598. <https://doi.org/10.1037/0021-843X.112.4.578>
- Tomas, V., Ahmed, H., & Lindsay, S. (2022). Unravelling the complexities of workplace disclosure among persons with non-visible disability and illnesses: A qualitative meta-ethnography. *Journal of Occupational Rehabilitation, 32*, 538-563. <https://doi.org/10.1007/s10926-022-10023-0>
- Vangelisti, A. L., Caughlin, J. P., & Timmerman, L. (2001). Criteria for revealing family secrets. *Communication Monographs, 68*, 1–27.
- Venetis, M. K., Chernichky-Karcher, S., & Gettings, P. E. (2018). Disclosing mental illness information to a friend: Exploring how the disclosure decision-making model informs

strategy selection. *Health Communication*, 33(6), 653-663.

<https://doi.org/10.1080/10410236.2017.1294231>

Venetis, M. K., Greene, K., Checton, M. G., Magsamen-Conrad. (2015). Decision making in cancer-related topic avoidance. *Journal of Health Communication*, 20, 306-313.

<https://www.doi.org/10.1080/10810730.2014.965364>

Venetis, M. K., Greene, K., Magsamen-Conrad, K., Banerjee, S. C., Checton, M., & Bagdasarov, Z. (2012). You can't tell anyone but...": Exploring the use of privacy rules and revealing behaviors. *Communication Monographs*, 79, 344-365.

<https://doi.org/10.1080/03637751.2012.697628>

Vittengl, J. R., & Holt, C. S. (2000). Getting acquainted: The relationship of self-disclosure and social attraction to positive affect. *Journal of Social and Personal Relationships*, 17, 53-66.

Vogel, D. L., & Wester, S. R. (2003). To seek help or not to seek help: The risks of self-disclosure. *Journal of Counseling Psychology*, 50(3), 351-361.

<https://www.doi.org/10.10137/0022-0167.50.3.351>

Wheeless, L. R., Wheelless, V. E., & Baus, R. (1984). Sexual communication, communication satisfaction, and solidarity in the developmental stages of intimate relationships. *The Western Journal of Speech Communication*, 48, 217-230.

Wiederman, M. W. (2015). Sexual script theory: Past, present, and future. In J. DeLamater & R. F. Plante (Eds.), *Handbook of the sociology of sexualities* (pp. 7-22). Springer.

Wilson, S.R. (2002). *Seeking and resisting compliance: Why people say what they do when trying to influence others*. SAGE.

- Wilson, S. R., Aleman, C. G., & Leatham, G.B. (1998). Identity implications of influence goals: A revised analysis of face-threatening acts and application to seeking compliance with same-sex friends. *Human Communication Research, 25*, 64-96.
<https://www.doi.org/10.1111/j.1468-2958.1998.tb00437.x>
- Wong, P. T. P., Reker, G. T., & Gesser, G. (1994). Death attitude profile-revised: A multidimensional measure of attitudes towards death. In R. A. Neimeyer (Ed.), *Death anxiety handbook: Research, instrumentation, and application* (pp. 121-148). Taylor & Francis.
- Wright, S. (2006). Discrimination of SM-identified individuals. *Journal of Homosexuality, 50*(2-3), 217-231. https://doi.org/10.1300/J082v50n02_10
- Yuan, K., Chan, W., Marcoulides, G. A., & Bentler, P. M. (2015). Assessing structural equation models by equivalence testing with adjusted fit indexes. *Structural Equation Modeling: A Multidisciplinary Journal, 00*, 1-12. <https://doi.org/10.1080/10705511.2015.1065414>