Exploring a Contextual Model of Sexual Self-Disclosure and Sexual Satisfaction

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Sexual self-disclosure is a critical component of relationship and sexual satisfaction, yet little is known about the mechanisms that facilitate a person's engagement in sexual self-disclosure. Individuals (N = 265) involved in romantic relationships participated in an online study testing a contextual model of sexual self-disclosure across three contexts: relationship context, sexual self-disclosure context, and outcome of sexual self-disclosure. Results suggest that sexual satisfaction was predicted by a positive relationship context and a positive sexual self-disclosure context. In addition, the sexual self-disclosure context was predicted by the relationship context. These findings emphasize the importance of examining contextual influences that determine whether an individual will engage in or avoid sexual self-disclosure and the consequences of this engagement or avoidance on sexual satisfaction.

A person's ability to communicate about his or her sexuality is instrumental in maintaining sexual satisfaction. It is through communication that couples are able to create a shared meaning of their sex life (Hess & Coffelt, 2012). Though there are risks involved in disclosing one's sexual likes and dislikes, research suggests that the positive consequences outweigh the negative. Specifically, when couples communicate about sex, they are able to negotiate when and how often they engage in sexual activity and determine how their sexual interactions characterize their relationship (Cupach & Metts, 1991; Metts & Spitzberg, 1996). Sexually specific communication is related to higher levels of sexual satisfaction (Byers & Demmons, 1999; Coffelt & Hess, 2014; Cupach & Metts, 1991; Faulkner & Lannutti, 2010; Hess & Coffelt, 2012; Montesi, Fauber, Gordon, & Heimberg, 2010), while poor sexual communication is associated with lower levels of satisfaction (Byers, 2005).

Sexual self-disclosure, or the disclosure of sexual preferences such as likes and dislikes (e.g., Brown & Weigel, 2016; Byers & Demmons, 1999; Cupach & Metts, 1991; LaFrance, 2010; Montesi et al., 2010; Sprecher, Christopher,

& Cate, 2006), is a critical aspect of sexual communication. Sexual self-disclosure facilitates the development of sexual knowledge, or the knowledge of self and partner sexual likes and dislikes, which is related to higher levels of sexual satisfaction (La France, 2010). More important, greater levels of sexual self-disclosure are linked to positive sexual interactions and increased relationship satisfaction (Byers & Demmons, 1999). Yet disclosing one's sexual likes and desires is not easy for many people. In fact, sexuality is often a taboo topic and one that is avoided in many relationships (Anderson, Kunkel, & Dennis, 2011; Baxter & Wilmot, 1985; Knobloch & Carpenter-Theune, 2004). The decision to disclose comes with potential risky consequences, whereby disclosing can lead to feeling vulnerable, while not disclosing can lead to loss of a partner's support (Bute, 2013). The disclosure of a sexual secret can easily leave one feeling criticized and stigmatized (Vangelisti, 1994). Moreover, disclosure involves potential risks not only for oneself but also for the partner and the relationship (Afifi & Steuber, 2009). For example, the disclosure of a stigmatized sexual preference might put pressure on the relationship, as well as put one's partner at risk of ostracism from the social network (Chaudoir & Fisher, 2010). Therefore, individuals likely weigh the risks and consequences of revealing their sexual likes and dislikes.

Despite the evidence that sexual self-disclosure can be an important contributor to satisfaction in romantic relationships, most research has explored the consequences of sexual disclosure and little is known about the factors that help facilitate

sexual self-disclosure. Therefore, the purpose of this study was to identify possible mechanisms that help account for people's engagement in sexual self-disclosure with their relationship partners. We proposed and tested a contextual model of sexual self-disclosure comprised of broader relationship factors, more immediate disclosure elements, and sexual satisfaction. Specifically, we investigated the ways in which relationship responsiveness, uncertainty, communication quality, and satisfaction promote or inhibit people's perceptions of risks and rewards of sexual self-disclosure, as well as the depth of sexual self-disclosure with their relationship partners. Finally, we tested how these contextual factors predict sexual satisfaction. Although researchers have studied several of these constructs separately, they have not been examined together as predictors of such relationship outcomes as sexual satisfaction.

Sexual Self-Disclosure

Self-disclosure refers to what and how people reveal information about themselves to others (e.g., Derlega, Metts, Petronio, & Margulis, 1993; Greene, Derlega, & Mathews, 2006; Sprecher & Hendrick, 2004). Derlega and colleagues (1993) described self-disclosure as messages that "transform the nature of the relationship, and the nature of the relationship transforms the meaning and consequences of the self-disclosure" (p. 11). For example, greater disclosure is associated with increased reports of love, intimacy, attraction, satisfaction, and commitment (see Cozby, 1973; Neimeyer & Banikiotes, 1981; Rubin, Hill, Peplau, & Dunkel-Schetter, 1980; Sprecher & Hendrick, 2004). Therefore, it is clear that self-disclosure is an important factor in relationship development and when considering romantic partnerships, sexual self-disclosure becomes a critical factor as well.

Sexual self-disclosure has also been identified as leading to a variety of positive relationship outcomes. Anderson

and colleagues (2011) found that discussing taboo sexual topics with one's relationship partner can lead to higher levels of openness, honesty, intimacy, understanding, and an enhancement of the couple's sex lives. Byers and Demmons (1999) found that sexual self-disclosure increased a couple's perceived sexual rewards in that they had more positive sexual interactions and even greater satisfaction with their relationship. Others have found that talking explicitly about sex is associated with higher sexual communication satisfaction and greater relationship quality (Coffelt & Hess, 2014; Hess & Coffelt, 2012; Montesi et al., 2010).

Contextual Model of Sexual Self-Disclosure and Sexual Satisfaction

Given that sexual self-disclosure is so important, why are some people more likely to disclose to their partners? Existing research points to several relationship qualities as indicative of a context where sexual self-disclosure can successfully exist. The proposed contextual model of sexual self-disclosure provided a framework for this study because it identifies and operationalizes several key factors influencing the choice to disclose sexual likes and desires. As shown in Figure 1 (illustrated using Ωnyx; von Oertzen, Brandmaier, & Tsang, 2012), sexual self-disclosure in an intimate relationship can be divided into a broader relationship context, a more immediate sexual self-disclosure context, and the resulting outcome of disclosure.

Relationship Context

The relationship context factors set the stage for the more immediate sexual self-disclosure context. A supportive relationship context can provide a safe environment for partners to share intimate sexual desires and opinions with each other, whereas an unsupportive relationship environment may
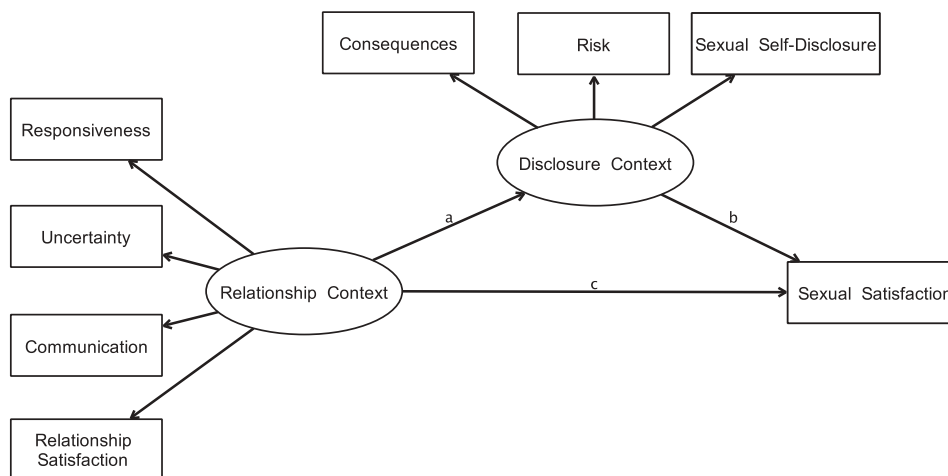

Figure 1.   Hypothesized model with predicted path labels.

inhibit the degree and extent to which people are willing to disclose their sexual desires and attitudes. In the present study, we examined the role of four important relationship features: perceived responsiveness of one's partner, uncertainty about the relationship, general quality of relationship communication, and overall relationship satisfaction.

Relationship Responsiveness. Relationship responsiveness captures the degree to which an individual believes that his or her relationship partner is attentive and supportive (Reis, Clark, & Holmes, 2004; Reis, Maniaci, Caprariello, Eastwick, & Finkel, 2011). When relationship partners perceive one another to be responsive to their needs, they feel valued, appreciated, and ultimately more comfortable being themselves around each other. In terms of self-disclosure, people generally feel comfortable disclosing to those with whom they feel close and whom they can trust (Petronio, 2002). Moreover, people are more willing to take a risk and reveal their needs and vulnerabilities to their partners when they believe their partners are responsive and supportive (Clark & Lemay, 2010; Laurenceau, Barrett, & Pietromonaco, 1998). Thus, we believed higher responsiveness would be indicative of a more disclosure-conducive relationship context.

Relationship Uncertainty. Another component of the relationship context is relationship uncertainty. Relationship uncertainty can be described as "ambiguity about involvement stemming from self, partner, and relationship sources" (Knobloch & Carpenter-Theune, 2004, p. 178). Individuals who are high in uncertainty are less confident about their own or their partner's involvement in their relationship, are less confident in their ability to predict their partner's behavior, and feel less affiliated with their partners and perceive more threats to the relationship (Berger & Calabrese, 1975; Knobloch & Carpenter-Theune, 2004; Knobloch, Miller, Bond, & Mannone, 2007; Knobloch & Solomon, 1999). Being able to accurately perceive the status of a romantic relationship and predict a partner's behavior is an important consideration for interpersonal communication. Uncertainty can be a barrier to open communication, resulting in indirect communication, which negatively affects sexual satisfaction (Theiss, 2011). Accordingly, we expected that greater uncertainty would detract from a relationship context that is supportive of sexual self-disclosure.

Relationship Communication Quality. The third component of the relationship context is the general quality of communication in the relationship. Given that it is through communication that partners come to understand and give meaning to their relationship (Burgoon & Hale, 1984), it is imperative to consider the quality of a couple's overall relationship communication when examining sexual self-disclosure. Byers (2005) asserted that good communicators are likely to report increases in relationship and sexual satisfaction, whereas poor communicators are likely to report

decreases in satisfaction. Moreover, to successfully disclose, a person must feel confident that he or she has the skills to disclose the information and produce the desired results (Afifi & Steuber, 2009). Such feelings should occur in a relationship already defined by high-quality communication. Thus, we predicted that higher general communication quality would indicate a more supportive relationship context.

Relationship Satisfaction. The final indicator of the relationship context is general satisfaction with the relationship. Researchers have noted that good communication is associated with relationship satisfaction, in that as communication quality increases, relationship satisfaction also increases (Byers, 2005; Montesi et al., 2010). Likewise, relationship satisfaction has been associated with greater perceived responsiveness (Clark & Lemay, 2010) and less uncertainty with the relationship (Knobloch & Theiss, 2011). While relationship satisfaction has sometimes been used as an outcome in previous sexual and relational communication research (e.g., Avivi, Laurenceau, & Carver, 2009; Byers, 2005; Coffelt & Hess, 2014; Denes, 2015), other researchers have argued that relationship satisfaction can be a predictor of relationship processes, including communication (e.g., Greene, 2009; Mark & Jozkowski, 2013; Rusbult, Martz, & Agnew, 1998). Following the latter, we treated relationship satisfaction as another indicator of the relationship context, under the guise that relationship satisfaction would positively contribute to a more disclosure-conducive relationship context.

Sexual Self-Disclosure Context

The sexual self-disclosure context can be seen as the more immediate context in which one's specific sexual disclosure-related perceptions, concerns, desires, and behaviors occur. Given that sexual self-disclosure occurs within the context of an already overall disclosing relationship (Byers & Demmons, 1999; Montesi et al., 2010), we predicted that couples with more positive or supportive relationship contexts would be more likely to exhibit a positive sexual self-disclosure context. In the present study, the sexual self-disclosure context was comprised of the perceived risks and positive consequences of disclosing sexual beliefs and desires, as well as the overall depth of one's sexual disclosure itself.

Risks and Consequences. When deciding whether to engage in self-disclosure, researchers have suggested that individuals consider the risks and consequences involved with making a disclosure (Afifi & Steuber, 2009). In terms of risks, researchers studying secret keeping and topic avoidance have found that one of the most common reasons people keep secrets or avoid certain topics is relationship protection (Guerrero & Afifi, 1995). In particular, people seek to protect their relationships because they do not want a negative evaluation and want to avoid disapproval, rejection, or betrayal by their partner

(Baxter & Montgomery, 1996; Montesi et al., 2013; Omarzu, 2000; Vangelisti, 1994; Vrij, Nunkoosing, Paterson, Oosterwegel, & Soukara, 2002). We expected that if the consequences of sexual self-disclosure were perceived as negative, people would see sexual self-disclosure as riskier and potentially damaging to their relationships.

However, some people can view sexual self-disclosure as having positive consequences. Researchers have suggested that positive outcomes resulting from sexual self-disclosure include increased intimacy, sexual satisfaction, openness, and understanding of a partner sexually (Anderson et al., 2011; Byers & Demmons, 1999; Coffelt & Hess, 2014; Hess & Coffelt, 2012; MacNeil & Byers, 2005, 2009; Montesi et al., 2010). Accordingly, we expected that when people perceive positive consequences resulting from sexual self-disclosure, they would see sexual self-disclosure as potentially enhancing their relationships.

Sexual Self-Disclosure. In general, people tend to limit or eliminate threat to their relationships, which could result in avoidance of particular topics. The most common topics that are avoided and kept secret are taboo topics, or those that can easily be stigmatized and condemned (Vangelisti, 1994). Such topics are usually recognized as a violation of given social rules, often being deemed inappropriate for open discussion (Guerrero & Afifi, 1995; Vangelisti, 1994). Given the sexuality taboo (e.g., Anderson et al., 2011; Baxter & Wilmot, 1985), it should come as no surprise that secrets about sexuality are very common (Vrij et al., 2002). The literature on self-disclosure flexibility, or the idea that people disclose or withhold disclosure depending on interpersonal or situational factors (e.g., Chelune, 1977; Cozby, 1973), lends support to this argument. Specifically, if the disclosure is seen as inappropriate, individuals will be less likely to disclose than if the disclosure is seen as appropriate (Chelune, 1977; Neimeyer & Banikiotes, 1981; Tardy & Hosman, 1982). Such findings suggest that not only is the immediate disclosure context important, the context of the relationship is also important in terms of reading situational cues from a relationship partner. For example, Neimeyer and Banikiotes (1981) found that individuals higher in disclosure flexibility were better able to attend to disclosure cues, or situational cues of appropriateness, as compared to individuals with low disclosure flexibility (see also Berg, 1987).

As shown in Figure 1, the relationship context in part determines the sexual self-disclosure context, in that responsiveness, uncertainty, general communication, and relationship satisfaction are influential in shaping perceived consequences, risk, and depth of disclosure. Greater relationship uncertainty, for example, has been linked to a higher number of avoided topics (Knobloch & Carpenter-Theune, 2004) and greater perceived threat to a relationship (Solomon & Knobloch, 2004; Theiss & Estlein, 2014). Along this line, we predicted that individuals who saw their partners as more responsive would report greater overall communication, and those who were more satisfied in their relationships would see sexual self-disclosure as more rewarding and less risky, resulting in a positive sexual self-disclosure context. Conversely, individuals who were uncertain about their relationships would see sexual self-disclosure as less rewarding and riskier, resulting in a negative sexual self-disclosure context.

Sexual Satisfaction

The third component of the contextual model explored in this study concerned an outcome of sexual self-disclosure, sexual satisfaction. Sprecher and Cate (2004) defined sexual satisfaction as "the degree to which an individual is satisfied or happy with the sexual aspect of his or her relationship" (p. 236). Researchers have demonstrated support for the association between sexual self-disclosure and sexual satisfaction, in that as sexual self-disclosure increases, sexual satisfaction increases (Byers, 2005; Byers & Demmons, 1999). Conversely, researchers have suggested that the avoidance of sexual topics is negatively related to sexual satisfaction (Theiss & Estlein, 2014).

In summary, based on our proposed contextual model (see Figure 1), we predicted that a more positive relationship context (higher levels of responsiveness, communication quality, and relationship satisfaction; lower relationship uncertainty) would be associated with a positive sexual self-disclosure context (positive perceived consequences, lower perceived risk of sexual self-disclosure, and greater depth of sexual self-disclosure). We also predicted that both a positive relationship context and positive sexual self-disclosure context would be related to increased sexual satisfaction. Last, we expected that the more distal relationship context would have indirect effects on sexual satisfaction through the more immediate sexual self-disclosure context.

Method

Participants and Procedures

Our sample consisted of 265 individuals, five of whom did not disclose their gender. Of those who did indicate gender, 181 were females (69.6%) and 79 were males (30.4%). All participants identified currently being in a romantic relationship. Of these, only six participants indicated having a same-sex romantic partner (2.3%). Participants reported being in their current romantic relationship for just over two and a half years on average ($M = 30.39$ months, $SD = 51.2$). Relationships were classified as dating one person exclusively (84.5%), being married or in a domestic partnership (9.8%), engaged (3.0%), and dating more than one person (2.6%). Participants were predominantly White (65.6%), with an average age of 22 years ($M = 22.48$ years, $SD = 5.31$).

Participants were recruited for an online study through the social psychology subject pool at a midsized public

university in the Western United States. They were invited to participate in a study on communication in romantic relationships and were informed that sexual content would be discussed. Respondents received partial fulfillment of course credit for research participation. The university's institutional review board (IRB) approved the methods and procedures of the study.

Measures

The survey consisted of several measures aimed at assessing the variables included in the contextual model of sexual self-disclosure shown in Figure 1. All means and standard deviations are presented in Table 1.

Relationship Responsiveness.   To assess individual perception of partner responsiveness, participants completed the 12-item Perceived Responsiveness Scale (Reis et al., 2011). Items included "My partner sees the 'real' me," "My partner esteems me, shortcomings and all," and "My partner seems interested in what I am thinking and feeling." Each question was answered on a 7-point Likert scale ranging from 1 (*Not at all true*) to 7 (*Completely true*). Higher scores indicated greater perceived responsiveness. The scale demonstrated high internal consistency (α = .94), which was consistent with previous research using the scale (e.g., Reis et al., 2011).

Relationship Uncertainty.   Relationship uncertainty was assessed using a scale developed by Knobloch et al. (2007). This 12-item scale offered the stem "How certain are you about …" for items such as "How you feel about your relationship," "Your partner's view of your relationship," and "The definition of your relationship." Response options ranged from 1 (*Completely or almost completely uncertain*) to 7 (*Completely or almost completely certain*). The scale was reverse-coded prior to analysis, with higher scores suggesting greater relationship uncertainty. The original scale (Knobloch et al., 2007) is divided into three subscales assessing self, partner, and relationship uncertainty. In the present study, we decided to use a unidimensional uncertainty score because the three subscales were highly correlated with one another (*r* range from .76 to .84), the average scores were not meaningfully different across the subscales, and the full scale displayed the highest reliability (α = .96).

Relationship Communication.   Participants were also presented with the 25-item Primacy Communication Inventory (Navran, 1967), which assessed the perceived quality of communication within their relationship. The original measure focused on marital relationships, but for this study the questions were modified to focus on relationship partners not specific to marriage (e.g., "spouse" was changed to "partner"). Questions included items such as "Do you and your partner avoid certain subjects in conversation?," "Do you and your partner use words which have a special meaning not understood by outsiders?," and "During your relationship, have you and your partner, in general, talked most things over together?" Responses were on a 5-point scale, ranging from 1 (*Never*) to 5 (*Very frequently*). Three negatively valenced items were reverse-coded prior to analysis ("Do you and your partner avoid certain subjects in conversation?," "How often does your partner sulk or pout?," and "Do you avoid telling your partner things which put you in a bad light?"). Higher scores suggested higher quality communication between partners. The scale demonstrated good reliability in our study (α = .87), which was comparable to its use in previous studies (e.g., Byers, 2005).

Relationship Satisfaction.   To assess relationship satisfaction, we adapted the Kansas Marital Satisfaction Scale (KMSS; Schumm et al., 1986) to encompass all romantic relationships, whereas the original scale focused on marriage. This three-item scale asked: "How satisfied are you with your relationship?," "How satisfied are you with your partner?," and "How satisfied are you with your relationship with your partner?" Participants responded using a 7-point Likert-style scale ranging from 1 (*Very dissatisfied*) to 7 (*Very satisfied*). The KMSS was found to be the best-performing commonly used measure of relationship satisfaction in Graham, Diebels, and Barnow's (2011) extensive meta-analysis. The KMSS displayed high reliability in the current study (α = .96).

Sexual Communication Risk.   To assess perceived risk in communicating about sexual topics, we developed a 25-item scale using items adapted from Vangelisti and Caughlin's (1997) work on family secrets. In their paper, Vangelisti and Caughlin included a measure used to evaluate the perceived function of sharing a secret with family members, consisting of six subscales: evaluation, maintenance, defense, privacy, bonding, and communication. We selected items that we believed fit relational constructs that could indicate risks associated with sexual self-disclosure, modifying the items to focus on sexual topics and relationship partners instead of the entire family. Items included "I worry that my partner would no longer like me if we discussed my sexual preferences," "Revealing my sexual preferences would create big problems for my relationship," and "My sexual preferences aren't

Table 1.   *Scale Means for Variables Included in Figure 1*

Variable	M	SD	Skew	Kurtosis
1. Responsiveness	5.95	0.94	−1.48	3.08
2. Uncertainty	2.05	1.20	1.21	0.71
3. Communication	3.82	0.44	−0.35	0.70
4. Relationship satisfaction	5.98	1.29	−1.42	1.46
5. Consequences	3.81	0.54	0.06	−0.30
6. Risk	1.99	0.91	1.48	2.40
7. Sexual self-disclosure	4.14	0.84	−1.11	0.82
8. Sexual satisfaction	4.32	0.84	−1.56	2.50

Note. Scale *n* sizes ranged from 259 to 265.

relevant to my partner." Participants responded on a 7-point scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*), with higher scores indicating greater perceived relationship risk associated with disclosing one's sexual preferences. Our scale demonstrated high reliability ($\alpha = .94$).

Perceived Consequences of Sexual Self-Disclosure.

To assess why participants might choose not to discuss sexual matters with their partners, participants were provided an 18-item scale in which they were asked to report what kind of consequence disclosing different sexuality items would have on their relationship with their partner. This scale was created from lists of avoided sexual topics identified by Anderson et al. (2011), Herold and Way (1998), and Knobloch and Carpenter-Theune (2004). Based on their results, we generated items that we believed were relevant sexual topics for today's college population. Items included "My sexual thoughts or fantasies," "Anal sex," and "The extent to which I believe sex is an important part of a relationship." Participants were asked to select the response that best reflected what they believed would happen if they were to talk to their partner about each item. Based on Anderson et al.'s (2011) work, response options ranged from 1 (*Negative relationship effect*) to 3 (*No relationship effect*) and 5 (*Positive relationship effect*). Our scale achieved good reliability ($\alpha = .84$), with higher scores indicating greater perceived positive consequences to sexual disclosure.

Depth of Sexual Self-Disclosure.

Next, participants were asked to report their actual levels of sexual self-disclosure within their current relationships. The Sexual Self-Disclosure Scale consisted of the same 18 items from the Consequences of Sexual Self-Disclosure Scale, but with different response options: 1 (*I have avoided talking to my partner about this topic*) to 5 (*I have talked openly and completely with my partner about this topic*). Our scale demonstrated high internal consistency ($\alpha = .94$). Higher scores indicated greater depth of disclosure with partners across the sexual topics.

Sexual Satisfaction.

Participants were asked to respond to four items focused on sexual satisfaction (La France, 2010) using a 5-point scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). The items were "My partner is good at getting me sexually aroused," "I can rely on my partner to know what makes me feel good," "I am satisfied with the sex life I have with my partner," and "My partner makes me feel sexually attractive." Higher scores indicated higher levels of sexual satisfaction.

The original scale included a fifth item: "My partner is able to bring me to orgasm when we have sex." This item was removed from analysis due to the presence of significant gender differences ($t (258) = 7.40$, $p < .001$, $M_{men} = 4.70$, $SD_{men} = .63$, $M_{women} = 3.82$, $SD_{women} = 1.28$). The four-item scale also exhibited slightly higher reliability ($\alpha = .90$) compared to the five-item scale ($\alpha = .88$).

Demographic Information. Last, participants were asked to provide basic demographic and relationship information: current age, gender, highest level of education completed, race/ethnicity, sexual orientation, relationship status, and relationship length.

Results

Preliminary Analyses

Before we conducted our main analyses, we examined the correlations among the primary study variables. Results showed that the correlations largely matched our expectations (see Table 2). In the relationship context, responsiveness was positively correlated with communication quality and relationship satisfaction and negatively correlated with uncertainty. Uncertainty was negatively correlated with both communication quality and relationship satisfaction. Communication quality was also positively associated with relationship satisfaction. In the sexual self-disclosure context, perceived positive consequences were positively correlated with depth of sexual self-disclosure, while perceived risk was negatively correlated with both depth of sexual self-disclosure and perceived consequences. The correlation between perceived risk and consequences was small ($r = -.34$), suggesting that these variables are relatively distinct. Finally, all variables correlated positively with our outcome, sexual satisfaction, except for uncertainty and risk, which were negatively correlated with sexual satisfaction.

We also examined our data for possible covariates. Two significant gender differences were found. Women perceived lower risk in sexual self-disclosure than men ($t (137.67) = 2.74$, $p < .01$, $M_{men} = 2.23$, $SD_{men} = .95$, $M_{women} = 1.88$, $SD_{women} = .87$) and slightly higher communication quality than men ($t (258) = -2.05$, $p < .05$, $M_{men} = 3.74$, $SD_{men} = .45$, $M_{women} = 3.86$, $SD_{women} = .44$). Mean difference tests could not be conducted for relationship type, education, or race/ethnicity because we did not have adequate sample sizes in each subgroup to compare them with confidence. Relationship length, however, was significantly correlated only with sexual satisfaction ($r = -.16$, $p = .01$).

Finally, before testing the contextual model displayed in Figure 1, we examined the ratings of the specific sexual topics

Table 2. *Bivariate Correlations for Variables in Figure 1*

Variable	1	2	3	4	5	6	7
1. Responsiveness	—						
2. Uncertainty	−.64	—					
3. Communication	.65	−.57	—				
4. Relationship satisfaction	.69	−.81	.54	—			
5. Consequences	.31	−.34	.44	.37	—		
6. Risk	−.28	.35	−.37	−.30	−.34	—	
7. Sexual self-disclosure	.36	−.44	.47	.37	.54	−.40	—
8. Sexual satisfaction	.48	−.44	.37	.50	.38	−.31	.40

Note. All correlations significant at the $p < .001$ level.

in greater detail. Individual item means for degree of consequence associated with the individual sexual topics and the depth of disclosure regarding the sexual topics are displayed in Table 3. The sexual topics with the greatest perceived negative consequences of disclosure were past sexual experiences, anal sex, and pornography, while the topics with the greatest positive consequences were what participants enjoy about sex, sexual preferences, and the use of safe-sex practices. As for frequency of disclosure, the use of safe-sex practices, oral sex, and what respondents enjoyed most about sex were the most openly disclosed topics. Past sexual experiences, pornography, and sexual thoughts or fantasies were the least openly disclosed topics.

Primary Analyses

We tested our hypothesized model using the lavaan package for structural equation modeling (SEM; version 0.5-22; Rosseel, 2012) in R (version 3.1.2; R Core Team, 2014). Initial data screening indicated that the data violated the assumption of univariate and multivariate normality and some missing data were identified (see Table 1 for skew and kurtosis statistics). Therefore, to account for these

Table 3. *Item Means for Depth of Sexual Self-Disclosure and Consequences of Sexual Self-Disclosure Scales*

Item	Depth Of Sexual Self-Disclosure		Consequences of Sexual Self-Disclosure	
	M	*SD*	*M*	*SD*
What I enjoy most about sex	4.43	1.01	4.48	0.69
Sexual preferences (e.g., techniques I find or would find pleasurable)	4.34	1.01	4.44	0.79
Use of safe sex practices	4.52	0.91	4.29	1.01
My sexual satisfaction	4.27	1.07	4.27	0.91
The extent to which I believe sex is an important part of a relationship	4.34	1.04	4.26	0.89
My views on the role of sex in the relationship	4.35	1.03	4.24	0.86
My personal views on sexual morality	4.37	1.00	4.18	0.93
Oral sex	4.44	1.03	4.13	1.00
My concerns about preventing sexually transmitted infections (STIs/STDs)	4.26	1.16	4.00	0.96
My sexual thoughts or fantasies	3.85	1.31	3.96	1.04
My sexual health history	4.18	1.18	3.87	1.07
My views concerning relationship exclusivity (e.g., whether or not I or my partner may engage in sexual activity with others)	4.36	1.15	3.73	1.43
What about sex makes me anxious	3.90	1.27	3.56	1.03
Masturbation	3.86	1.37	3.49	1.09
Sexual problems or difficulties I might have	3.97	1.22	3.44	1.11
Pornography	3.63	1.45	2.93	1.20
Anal sex	3.96	1.44	2.71	1.27
My past sexual experiences	3.53	1.49	2.63	1.14

Note. Individual item *n* sizes ranged from 258 to 263. Items are arranged in order from largest to smallest mean scores on the Consequences of Sexual Self-Disclosure Scale.

violations, maximum likelihood estimation with robust standard errors (MLR) and full information maximum likelihood (FIML) was used for the SEM analyses. When running SEM analyses, a model is considered to be of good fit if results support a comparative fit index (CFI) $\geq$ .95, root mean square error of approximation (RMSEA) $\leq$ .08, and standardized root mean square residual (SRMR) $\leq$ .08 (Bollen & Long, 1993; Byrne, 2001; Hu & Bentler, 1999; Kline, 2011).

Our original hypothesized model shown in Figure 1 did not demonstrate good fit, χ^2 (18) = 68.13, $p < .001$, CFI = .923, RMSEA = .103 90% confidence interval [CI] [.08, .13], SRMR = .047. Given the substantial correlation between uncertainty and relationship satisfaction ($r = -.81$, $p < .001$), we decided to revise our model to include the correlation between the error terms for these two relationship context indicator variables. The addition of these correlated error terms resulted in an acceptable model fit, χ^2 (17) = 44.74, $p < .001$, CFI = .957, RMSEA = .078 90% CI [.05, .10], SRMR = .037. Regression coefficients and loadings for indicator variables for this model are presented in Figure 2.

Responsiveness, uncertainty, communication quality, and relationship satisfaction loaded high on the latent construct of relationship context. This lends support to our assertion that the relationship context is best described by these four variables. Likewise, perceived consequences, perceived risk, and depth of sexual self-disclosure were also accurate descriptors of the latent sexual self-disclosure context. Results further lend support for our hypothesized model in that the relationship context was a strong, significant predictor of the disclosure context (path *a*) and sexual satisfaction (path *c*), suggesting that the more positive the relationship context, the more positive the perceived disclosure context and the higher a person's sexual satisfaction. The disclosure context was also a significant predictor of sexual satisfaction (path *b*), suggesting that a more positive disclosure context is related to higher sexual satisfaction. In addition, the indirect effect of the relationship context on sexual satisfaction through the disclosure context (paths *a* and *b*) was also significant, ($b = .20$, $p < .01$), lending support to the assertion that the disclosure context is an important predictor of sexual satisfaction in tandem with the relationship context.

Given the evidence of gender differences mentioned earlier on two indicator variables, we considered whether the pattern of relationships in the path model were different for women and men. Some research suggests that relationship quality may be more important for women's sexual satisfaction, while more immediate sexual factors are more impactful for men (e.g., Impett, Muise, & Peragine, 2014; Impett & Peplau, 2006; Peplau, 2003; Regan & Berscheid, 1996). We conducted SEM analyses treating women and men as separate groups in the same analysis to determine if the path structure for the two were equivalent. We first tested a model in which the pathways for women and men were allowed to vary (χ^2 (34) = 67.07, $p = .001$, CFI = .954, RMSEA = .086 90% CI [.06, .12], SRMR = .043). We then
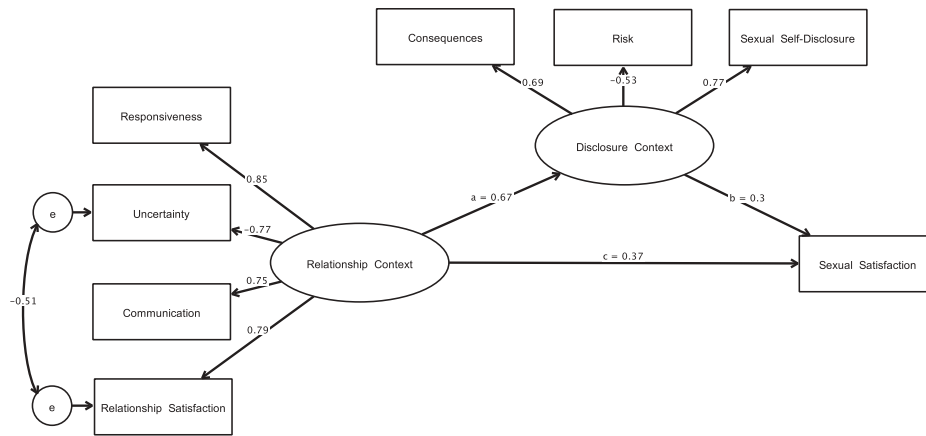
Figure 2. Final model with standardized path coefficients. *Note.* Paths *b* and *c* significant at *p* < .01; path *a*, correlated error term, and all indicator variables significant at *p* < .001.

tested a model in which the paths for women and men were constrained to be equal (i.e., no differences between women and men; χ^2 (37) = 69.04, *p* = .001, CFI = .955, RMSEA = .082 90% CI [.05, .11], SRMR = .053). The second, constrained model did not demonstrate significant improvement over the model with free parameters ($\Delta\chi^2$ (3) = 1.967, *p* > .05). Thus, the results suggest that the primary model pertains to both women and men.

As mentioned in the literature review, although the hypothesized contextual model tested here considered relationship satisfaction to be a central component of the relationship context, some research has examined relationship satisfaction as an intervening variable between sexual disclosure and sexual satisfaction. For example, MacNeil and Byers (2005) found evidence that relationship satisfaction serves as a partial mediator of the effect of sexual self-disclosure on sexual satisfaction. Therefore, we examined an alternative model where, instead of being an indicator of the relationship context, relationship satisfaction acted as an intervening variable between the disclosure context and sexual satisfaction. In other words, in the alternate model, relationship satisfaction was predicted by both the relationship and disclosure contexts, and sexual satisfaction was predicted by the relationship context, disclosure context and relationship satisfaction. This alternative model, however, did not demonstrate acceptable fit, χ^2 (16) = 62.27, *p* < .001, CFI = .929, RMSEA = .104 90% CI [.08, .13], SRMR = .044, lending confidence to the hypothesized contextual model tested in this study.

Discussion

The purpose of this study was to explore a contextual model of sexual self-disclosure in order to identify and test factors that contribute to a person's engagement in or avoidance of sexual self-disclosure. To date, most disclosure models have explored

the consequences of sexual self-disclosure, and little is known about the factors that help facilitate sexual self-disclosure. This study served as an initial attempt to better identify the relationship and disclosure contexts connected with sexual self-disclosure. Based on our contextual model, we predicted that broader relationship context factors (responsiveness, uncertainty, general communication quality, and relationship satisfaction) would be associated with the more immediate sexual disclosure context (risks, consequences, and depth of disclosure), which in turn would lead to a specific disclosure outcome such as sexual satisfaction. The findings supported the model, and we discuss implications of these results in the following section.

First, the findings provided evidence that relationship responsiveness, uncertainty, communication quality, and satisfaction were important components of an underlying relationship context. Conceptually this makes sense and lends further support to research suggesting that higher levels of responsiveness, communication quality, and satisfaction, and lower levels of uncertainty are related to greater overall relationship quality (Byers, 2005; Cupach & Metts, 1991; Montesi et al., 2010; Reis et al., 2004). Moreover, the relationship context provides a broader, conducive setting for the more immediate sexual self-disclosure context. A supportive relationship context can provide a safe environment for partners to share their intimate sexual desires and beliefs with each other. A relationship environment that is not seen as supportive may inhibit the degree and extent to which people are willing to disclose their sexual desires and attitudes.

Second, our results suggested that a positive sexual self-disclosure context was at least partially made up of perceptions of positive consequences of disclosure, lower perceptions of risk resulting from the disclosure, and greater overall depth of sexual self-disclosure. A positive sexual self-disclosure context is indicative of an environment in which expressing one's sexual self is safe, an important consideration when discussing taboo topics such as one's sexuality (e.g., Byers & Demmons, 1999; Derlega, Winstead, Mathews, & Braitman, 2008; Petronio, 2002). Further, the disclosure context is strongly

predicted by the relationship context, lending support to the assertion that disclosure—and related processes—are more likely to occur within the context of an already open, satisfying relationship (Byers & Demmons, 1999; Montesi et al., 2010).

Third, our analyses suggested that a combination of both the relationship and disclosure contexts was critical for greater sexual satisfaction. Both the relationship and the disclosure contexts were predictive of higher sexual satisfaction, as was the indirect effect of the relationship context through the disclosure context. In other words, it is likely that higher sexual satisfaction is the result of both a safe disclosure context and a supportive relationship context.

Theoretical and Practical Implications

Taken together, our results hold several implications for the study of sexual self-disclosure processes in romantic relationships. First, it is evident that an overall positive relationship context is an important factor when considering how much people engage in sexual self-disclosure and how sexually satisfied they are. Seeing a relationship partner as responsive to one's needs and being certain about the relationship are key for high satisfaction with the relationship (e.g., Segal & Fraley, 2016; Theiss & Knobloch, 2011). This suggests that factors located within the relationship context (e.g., perceptions of high levels of responsiveness from a relationship partner, greater certainty in the status of the relationship and perceptions of partner feelings regarding the relationship, higher quality communication in general, and greater relationship satisfaction) are critical ingredients for overall sexual satisfaction. These same ingredients are largely determinant of a positive disclosure context, suggesting that perceptions of positive consequences from disclosing, lower risk of disclosing, and greater depth in discussing sexual topics create a positive sexual self-disclosure context, which in turn help boost sexual satisfaction. Greater perceptions of risk and consequences are likely related to the taboo of talking about sex, which causes people to avoid discussing topics that are socially unacceptable (e.g., Anderson et al., 2011; Baxter & Wilmot, 1985; Knobloch & Carpenter-Theune, 2004). It is quite possible that a supportive relationship context is conducive to sexual self-disclosure because partners might feel less risk and vulnerability because of this support. Last, the relationship and sexual self-disclosure contexts are critical predictors of sexual satisfaction. Partners are more likely to be sexually satisfied when they are satisfied with their relationship as a whole *and* engage in sexual self-disclosure, lending support to previous findings (Byers, 2005; Byers & Demmons, 1999).

The contextual model tested here also contributes to the study of sexual self-disclosure and sexual communication by extending our attention beyond the disclosure exchange between romantic partners. Considering the context in which sexual self-disclosure occurs is critical for our understanding of disclosure processes because sexual communication does not occur solely between romantic relationship partners; rather, romantic partners engage in or avoid sexual self-disclosure as a result of each relationship partner's beliefs, experiences, evaluations of the romantic relationship, and interactions with friends and family members (Brown & Weigel, 2016). Specifically, we tested four components of the relationship context as predictors of sexual self-disclosure: relationship responsiveness, relationship uncertainty, relationship communication quality, and relationship satisfaction. Because of the taboos surrounding sexual topics, we selected these components as factors that could encourage or discourage discussion of sexual topics. Our results emphasize the importance of these four precursor factors, acknowledging that variables in the relationship context are crucial in determining sexual self-disclosure processes and associated outcomes. However, future research might explore other potentially important features of the relationship context, such as the relationship goals partners bring to the partnership, their level of commitment, and the previous history of disclosure in the relationship.

It is important to note that the results of this study suggest relationship satisfaction worked better as a relationship context factor than when tested as an intervening variable in the alternative model. Nevertheless, it is likely that the connection between relationship satisfaction and sexual self-disclosure is reciprocal. By this, we mean that relationship satisfaction likely both predicts sexual self-disclosure (i.e., people are more likely to disclose when they are satisfied with their relationship) and is an outcome of sexual self-disclosure (i.e., people will be more satisfied with their relationships following sexual self-disclosure, assuming that the reaction to the disclosure is positive and supportive). Given the likely reciprocal nature, we encourage researchers to continue examining the links between relationship satisfaction and sexual self-disclosure in intimate relationships.

Last, this study has practical implications in that it supports the work of Jones, Meneses da Silva, and Soloski (2011). These researchers presented a "sexological" systems model of sex therapy, in which they emphasized context beyond the relationship partners, and even the relationship itself, as critical considerations when discussing and treating sexual issues. Our presentation and testing of the contextual model of sexual self-disclosure helps aid such propositions in that it emphasizes it is not enough to simply look at whether partners are disclosing, but rather examines what factors might be impacting their decision to engage in or avoid sexual self-disclosure.

Limitations and Conclusions

The present research does not come without limitations. First, our sample consisted of college students. While our measures exhibited high reliability, the broader relationship experiences of college students deserve some scrutiny. For

example, it is possible that young people may be less likely to disclose sexual wants to their partners for a host of reasons, including navigating the meaning of being in a relationship and not having enough sexual experience to know their own sexual likes and dislikes. Thus, future research should be extended beyond college populations so that we can learn how sexual self-disclosure patterns play out in the broader population. Relatedly, while we found no evidence of gender differences in our contextual model, given that previous research has suggested men and women often approach talking about sex differently (e.g., Impett et al., 2014; Impett & Peplau, 2006; Peplau, 2003; Regan & Berscheid, 1996), future research would do well to continue exploring the potential role of gender in the contexts of sexual self-disclosure.

Another limitation of the present study is that it was reflective of individuals, not relationships. In other words, our results were based on one partner's experiences. As Keck and Samp (2007) advocated, the inclusion of dyadic data in future research will help us better understand the dynamics of sexual communication within couples. Also, the current study relied solely on self-report data and was correlational in nature. Because of the former, our results must be interpreted with an awareness of the biases that coincide with self-report measures, such as social desirability; because of the latter, these findings cannot imply causality.

Last, future research would do well to examine differences based on disclosure flexibility and self-disclosure bias (e.g., Catania, 1999; Chelune, 1977). Specifically, it would behoove future researchers to attend to perceptions of appropriateness of sexual self-disclosures across different situations, as rated by both the partner disclosing and the partner receiving the disclosure. It is possible that individuals who are better at picking up situation appropriateness cues are more likely to see sexual self-disclosure as less risky. Research is also needed regarding when a sexual self-disclosure is appropriate as dictated by interpersonal and social norms and how perceptions of appropriateness change as a function of relationship length (e.g., at the beginning of a relationship versus an already established relationship).

Despite these limitations, our findings suggested that sexual self-disclosure and sexual satisfaction occur within the context of an overall satisfying, responsive, certain, and disclosing relationship. Although recent work has identified many positive outcomes resulting from sexual self-disclosure in a relationship (e.g., Anderson et al., 2011; Byers & Demmons, 1999; Coffelt & Hess, 2014; Hess & Coffelt, 2012), less research has explored the contextual climate in which such disclosure occurs. The contextual model put forth in this article is an important first step in creating a better understanding of the factors that help explain why people choose to disclose their sexual wants and desires to their partners. Given the results, it appears that sexual self-disclosure is a complex construct that needs to be afforded more attention by sexual communication and relationship researchers.

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