

Sexual Self-Schemas and Sexual Satisfaction in Romantic Relationships

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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Abstract

The aim of the present research was to investigate the association between how individuals in romantic relationships conceptualize themselves sexually, and levels of reported sexual satisfaction for both themselves and their partner. Of additional interest was how an individual's sexual self-schemas are associated with their *perception* of their partner's sexual satisfaction. Reasoning that sexual self-schemas will have an influence on how individuals interpret and act in sexual situations, we propose that individuals' sexual self-schemas will play a role in sexual satisfaction within relationships. We additionally examined whether sexual self-schemas influenced an individual's perceptions of their partner after controlling for that partner's reported levels of satisfaction. For both men and women, individual's own sexual self-schemas were associated with own sexual satisfaction, but not partner's sexual satisfaction. Additionally, individual's own sexual self-schemas were associated with perceptions of partner's sexual satisfaction, even after controlling for that partner's self-reported sexual satisfaction.

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Sexual Self-Schemas and Sexual Satisfaction in Romantic Relationships

To efficiently interpret information from the world around us, our brains develop cognitive structures to aid in organizing and combining those data into larger, more understandable concepts and objects. One way that researchers have conceptualized these structures is to identify them as schemas (Bartlett, 1932; Piaget, 1926). Schemas help us rapidly take in a vast quantity of information, and use past experience with similar situations to interpret that information quickly.

Within romantic relationships, schemas influence how individuals perceive, organize, and make sense of information relevant to their relationships. Individuals might have specific gender schemas for how members of a particular gender typically behave (Bem, 1987). They might have schemas about how individuals should solve difficulties, or the meaning of particular behaviours, or any number of elements critical to relationships (Andersen & Cyranowski, 1994; Andersen, Cyranowski, & Espindle, 1999). However, individuals not only have schemas about other objects and peoples, they also have schemas about themselves, referred to as self-schemas.

Markus (1977) defines self-schema as cognitive structures that arise from previous experience that guide the processing of information about the self, thus aiding organization and processing of information from similar situations. In this way, an individual's self-schemas influence how he or she perceives information, both from other people and the environment around them. Further, Markus argued that the vast array of self-schemas possessed by an individual guide perception of self-relevant information that forms said individual's self-concept. Within romantic relationships, people's self-schemas may shape their perceptions of their partners, as well their perceptions of their relationships. For example, individuals with a

depressive self-schema may interpret their partners' actions or words in ways that are more critical of the individual, whereas an individual without such a depressive self-schema might view those actions or words as more neutral.

Building upon the notion that the self is multifaceted (Carver & Scheier, 1981), Andersen and Cyranowski (1994) suggest that one of the central types of schemas humans develop is sexual self-schemas, cognitive generalizations about sexual aspects of the self. They suggested that sexual self-schemas develop as a result of individuals making observations about their own sexual behaviours, sexual emotions, and sexual attitudes and judgments (Andersen & Cyranowski, 1994; Andersen et al., 1999). Further, they suggest that individuals make use of these sexual self-schemas to predict how they will act in future situations, or how they will make sexual decisions. Andersen and colleagues (1999) proposed that, conceptually, the content of men's sexual self-views to differ from women's. Given this assumption, they chose to develop similar but separate sexual self-schema measures for both men and women (Andersen & Cyranowski, 1994; Andersen et al., 1999).

For the women's sexual self-schema measure, Andersen and Cyranowski (1994) found that items formed three factors, which they labeled *Passionate – Romantic*, *Open – Direct* and *Embarrassed – Conservative*. They considered the first two clusters of items to constitute factors with a positive valence, while the *Embarrassed – Conservative* cluster formed a factor with a negative valence. The researchers proposed a bivariate model, considering the two positive factors (*Passionate-Romantic* and *Open-Direct*) to form a positive continuum, and then using the *Embarrassed-Conservative* factor to form a second, negative continuum. For the measure of men's sexual self-schema, Andersen, Cyranowski and Espindle (1999) also found that the items clustered into three factors, which they labeled *Passionate – Loving*, *Powerful –*

Aggressive and Open-minded – Liberal. However, in this case researchers found that all three factors appeared to be positive, as the vast majority of terms in each had a positive valence. For the men's sexual self-schema measure, they combined all three factors into a total score, and categorized men along a single continuum as from high scorers to low scorers.

The psychometric properties of the Men's Sexual Self-Schema and Women's Sexual Self-Schema measures have been established in a number of different studies (Andersen & Cyranowski, 1994; Andersen et al., 1999). For example, Andersen and Cyranowski showed that the measures had good internal consistency high and test-re-test reliability. In addition, they have been shown to have high validity. For example, Andersen and Cyranowski (1994) found that women with highly positive sexual self-schemas were more likely to report positive attitudes about their own sexuality and sexual behaviour, report higher levels of sexual arousability, and have a more extensive sexual repertoire. They also found that, compared to men with less positive sexual self-schemas, men who endorsed more positive sexual self-schemas reported higher levels of sexual arousal, were more likely to form long-term relationships, engaged in a greater number of sexual activities, and were more likely to report feelings of love toward their partners. They also demonstrated that the construct of sexual self-schemas is distinct from measures of self-esteem, extraversion, positivity, negativity, and social desirability.

Prior Research on Sexual Self-Schemas and Interpersonal Functioning

Since Andersen and Cyranowski developed their first sexual self-schema measure nearly twenty years ago, a number of researchers have examined the relationships between sexual self-schema and variables related to interpersonal and sexual functioning. These studies are briefly described in an Appendix at the end of this document, with key findings summarized below.

Researchers have tried to understand whether certain experiences or body conditions might be related to sexual self-schema. Wiederman and Hurst (1997) found that sexual self-schemas were correlated with facial and body attractiveness, and degree of social avoidance due to appearance-related concerns. However, they found that sexual self-schemas did not appear to be related to body size, shape, dissatisfaction, or history of teasing. Similarly, researchers have found that women who reported experiencing childhood sexual abuse reported themselves as lower on the *Passionate-Romantic* factor of the sexual self-schema measure (Meston, Rellini & Heiman, 2006).

Researchers have also examined whether sexual self-schemas might be associated with particular ideals or attitudes. Investigating African American men, researchers found that centrality of cultural identity and adoption of masculine ideals explained a significant portion of the variance in men's sexual self-schemas (Hall, Morales, Coyne-Beasley & St. Lawrence, 2012). Taylor (2006) found that men who reported reading pornographic magazines were more likely to report higher levels of the *Powerful-Aggressive* factor and held more sexually permissive attitudes. Similarly, Abdolsalehi-Najafi and Beckman (2013) found that women who held negative sexual self-schemas were more likely to report higher levels of sex guilt.

Research has shown that sexual self-schemas can be related to other clinical difficulties. Reissing, Yitzchak, Khalife, Cohen and Amsel (2003) found that women suffering from vaginismus reported less positive sexual self-schema relative to controls. Similarly, sexual self-schemas have been shown to predict sexual behaviour and responsiveness in both female cancer survivors and healthy controls (Andersen, Xichel, & Copeland, 1997; Carpenter, Andersen, Fowler & Maxwell, 2009). Female breast cancer survivors with more negative sexual self-schema were more likely to report sexual disruption and body-change stress (Yurek, Farrar, &

Andersen, 2000). However, when examining medical help-seeking behaviours in male prostate cancer survivors, sexual self-schemas did not account for a significant portion of help-seeking variance in the final model proposed by Schover and colleagues (Schover, Fouladi, Warneke, Neese, Klein, Zuppe, & Kupelian, 2004).

Sexual Self-Schemas and Own and Partner's Sexual Satisfaction

In the studies reviewed above, researchers examined the association between sexual self-schemas and a variety of sexually-relevant outcomes. In the current study, we focus specifically on the construct of sexual satisfaction. Research has demonstrated strong links between sexual satisfaction and relationship satisfaction (Henderson-King & Veroff, 1994; Morokoff & Gilliland, 1993). In longitudinal studies, sexual satisfaction has been found to predict relationship stability for both men and women, such that individuals who report lower levels of sexual satisfaction in their long-term relationships are more likely to have those relationships end (Karney & Bradbury, 1995). Thus, sexual satisfaction appears to be a variable of critical interest for understanding relationship outcomes.

Researchers have found that women with positive sexual self-schemas report greater levels of sexual satisfaction than women with more negative self-schemas (Cyranski, Aarestad and Andersen, 1999; Rellini & Meston, 2011). The first aim of the current study is to replicate this research with women in a broad community sample, and to extend this examination of the association between sexual self-schemas and sexual satisfaction to a sample of male participants. To our knowledge, no past study has examined whether men's sexual self-schemas are related to sexual satisfaction. Additionally, previous research on sexual and relationship

outcomes using these sexual self-schema measures have only focused on a single gender at a time, while the present study includes data from both partners of a couple.

Our sample consisted of individuals in long-term committed relationships, as the majority of dyadic sexual behaviour appears to occur within the context of a committed relationship (DeLamater & Hyde, 2004). To the best of our knowledge, the current study is the first study to examine the link between sexual self-schemas and sexual satisfaction using data from both members of a dyad. This is significant as it allows us to examine not only the association between individuals' own sexual self-schemas and sexual satisfaction, but also to examine the association between people's own self-schemas and their partners' sexual satisfaction.

We predicted that both men and women with more positive sexual self-schemas would report higher levels of sexual satisfaction. This prediction was based on research findings that have examined the link between sexual self-schemas and outcomes that are theoretically related to higher levels sexual satisfaction, such as more positive sexual attitudes, less sexual anxiety, and less sex-related guilt (Abdolsalehi-Najafi & Beckman, 2013; Andersen & Cyranowski, 1994; Andersen et al., 1999). For example, an individual with a positive sexual self-schema might reflect more positively on sexual experiences, or might be open to more forms of sexual behaviour, which may in turn lead to greater levels of sexual satisfaction. As individuals use their self-schemas to make sense of the world, an individual with a more positive self-schema may both create more satisfying experiences, and judge past experiences to be more satisfying (Markus & Wurf, 1987).

Our second goal for the present study was to investigate whether participants' own sexual self-schemas were associated with their partners' sexual satisfaction. As discussed above, sexual self-schemas have been found to be associated with a number of sexually relevant variables. As such, if people's sexual self-schemas impact their own sexual functioning, it may be the case that their partner's sexual functioning will be impacted as well. Indeed, prior research has found that partners' reports of sexual satisfaction and sexual functioning within a dyad are moderately correlated (Rehman, Rellini & Fallis, 2011). Thus, for our second hypothesis we predicted that partners of both men and women with more positive sexual self-schemas would report higher levels of sexual satisfaction.

Sexual Self-Schemas and Perceptions of Sexual Satisfaction

"No doubt very few people understand the purely subjective nature of the phenomenon that we call love, or how it creates, so to speak, a supplementary person, distinct from the person whom the world knows by the same name, a person most of whose constituent elements are derived from ourselves."

— Marcel Proust, *Within a Budding Grove*

The third goal of the current study was to examine how an individual's sexual self-schemas influence their perceptions of partner's sexual satisfaction. We explored whether sexual self-schemas could bias an individual's perceptions of the partner's sexual satisfaction. Specifically, an individual with a positive sexual self-schema might consistently perceive her partner to be more sexually satisfied than they are.

Previous research on perceptions in romantic dyads has found strong support for projection, or using qualities in oneself to make predictions about one's partner (Lemay, Pruchno & Field, 2006; Lemay, Clark, & Feeney, 2007). Lemay and colleagues examined couples ratings of both own and partner's responsiveness to problems. They asked individuals report the degree to which they felt their partners were responsive to their own expressed needs, and how responsive they were to their partner's needs. Lemay and colleagues found that an individual's own self-ratings of responsiveness were a much stronger predictor of ratings of partner's responsiveness than that partner's own ratings of his/her responsiveness. Similarly, when making treatment decisions for a spouse suffering from end-stage renal disease, individuals typically used their own preferences to determine which treatment their spouse would prefer (Lemay, Pruchno & Field, 2006). This suggests that individuals' own traits may be an important determinant of their perceptions of their partner's qualities, traits, and preferences, above and beyond the partner's self-ratings in these areas.

Thus, it may be that an individual's sexual self-schema impacts not only an individual's own sexual satisfaction and functioning, but also their perception of their partner's satisfaction and functioning. If this is the case, then understanding how an individual conceptualizes themselves sexually is of key interest in understanding couple's sexuality and sexual functioning.

It was hypothesized that positive sexual self-schemas for both men and women would be associated with the perception of greater levels of sexual satisfaction in their partner. Additionally for women, it was hypothesized that negative sexual self-schema would be associated with lower perceived partner sexual satisfaction.

Method

Participants

One hundred seventeen heterosexual couples were recruited to participate in the present study as part of the first wave of a larger longitudinal study examining the effects of interpersonal factors on sexual satisfaction and sexual functioning. The couples were recruited from Southwestern Ontario using online and newspaper advertisements, along with posters in local businesses and the offices of physicians and mental health professionals.

As additional inclusion criteria couples were required to either be married, or cohabiting for a minimum of two years. The two-year minimum for cohabiting couples was chosen to ensure that cohabiting couples maintained a similar level of commitment to their relationships as married couples. There were no significant differences between the levels of commitment reported by women who were married ($M = 93.78$, $SD = 1.03$) or cohabiting ($M = 92.28$, $SD = 1.60$), $t(113) = -0.79$, $p = 0.44$, or between men who were married ($M = 94.42$, $SD = 8.82$) or cohabiting ($M = 94.77$, $SD = 7.11$), $t(112) = -0.18$, $p = .84$.

Both members of the couple were required to be between the ages of 21 and 65. To ensure that participants would be able to accurately understand and complete study measures, both members of the dyad were required to be able to read and speak English at a grade 8 level. Additionally, as previous research has shown that the recent birth of a child negatively impacts sexual satisfaction (Chivers, Ross, Cook, Grigoriadis, Villegas, & Bradley, 2008), the female partner must not have given birth in the past six months prior to the beginning of the study.

The average length of relationship at the time of participation in the study was 10.64 years ($SD = 10.00$), and 72.65% reported being married. 40.17% of the couples who participated

did not have children, and the remaining couples had an average of 2.34 children ($SD = 1.31$). The female participants had an average age of 35.95 years ($SD = 10.97$) and had completed an average of 16.13 years of education ($SD = 3.71$). The male participants had an average age of 38.32 years ($SD = 11.54$) and had completed 15.48 years of education ($SD = 3.2$). 93.1% of the female participants identified as white, 1.7% identified as African, 1.7 % identified as Hispanic, 0.9% identified as South Asian, 0.9% identified as Other Asian, and 1.7% identified as other. Of the male participants, 87.2% identified as white, 3.4% identified as South Asian, 2.6% identified as First Nation, 1.7 % identified as Hispanic, 0.9% identified as African, 0.9% identified as Other Asian, and 3.4% identified as other.

Measures

Background Questionnaire. This questionnaire was used to gather demographic information about participants, along with information about the history of their current relationships.

Broderick Commitment Scale. The Broderick Commitment Scale (Beach & Broderick, 1983) is a single-item measure that assessed participant's level of commitment to their current relationship on a scale from 0 (Not at all committed) to 100 (Completely committed).

Index of Sexual Satisfaction (ISS). The Index of Sexual Satisfaction (Hudson, Harrison, & Crosscup, 1981) is a 25-item measure of sexual satisfaction. Participants are asked to respond to statements about their sex life, and rate how often those statements apply to them from 1 (Rarely or none of the time) to 7 (Most or all of the time). In the present study, ISS scores have been reversed for ease of understanding, such that higher ISS scores are indicative of higher levels of sexual satisfaction. These items had high internal consistency within our

sample for both men (Cronbach's $\alpha = .95$) and women (Cronbach's $\alpha = .96$). We additionally used a modified version of the ISS which was used to gather participant's perceptions of their partner's levels of sexual satisfaction. This was achieved by modifying each item to switch instances of "I" with "My partner" and vice versa. These also had a high level of internal consistency for both men (Cronbach's $\alpha = .94$) and women (Cronbach's $\alpha = .94$).

Men's Sexual Self-Schema. The Men's Sexual Self-Schema measure (Andersen, Cyranowski & Espindle, 1999) asks male participants to rate 27 trait words (e.g. *Sensual* and *Arousable*) on how well they describe the participant. Each trait word is rated from 0 (Not at all descriptive of me) to 6 (Very descriptive of me). Within our sample this measure had a high level of internal consistency (Cronbach's $\alpha = .84$).

Women's Sexual Self-Schema. The Women's Sexual Self-Schema measure (Andersen & Cyranowski, 1994) asks female participants to rate 26 trait words (e.g. *Loving* and *Romantic*) on how well they describe the participant. Each trait word is rated from 0 (Not at all descriptive of me) to 6 (Very descriptive of me). This measure had an acceptable level of internal consistency for both Positive (Cronbach's $\alpha = .77$) and Negative (Cronbach's $\alpha = .61$) factors within our sample.

Andersen and colleagues have argued that both sexual self-schema measures have strong convergent validity, as demonstrated by correlations with a number of other sexually related measures (e.g. sexual behaviour, attitudes, frequency of sexual activity, sexual arousability). They likewise argued that the measures exhibited discriminant validity from measures of self-esteem and extraversion in measures they deemed central to the study of

sexuality, such as lifetime sexual activity, sexual arousability, and global ratings of the self as a sexual man/woman (Andersen & Cyranowski, 1994; Andersen et al., 1999).

Procedure

Couples who met the eligibility criteria and agreed to participate in the study came into the laboratory together. After giving consent to participate, participants were taken to separate rooms where they completed study questionnaires. The Background Questionnaire was completed first using paper and pencil, and the remaining questionnaires were administered in a random order on laptops, along with several other questionnaires pertaining to interpersonal relationships and sexual functioning, that are not relevant to the present findings.

Results

Data for the models pertaining to sexual self-schema and sexual satisfaction were analyzed using path analysis in AMOS 20.0 (Arbuckle, 2011), using the maximum likelihood method to handle missing data (Anderson, 1957). The data met criteria for univariate and multivariate normality suggested by Kline (1998) and West, Finch, and Curran (1995), as skew values were all below |1.5| and kurtosis values fell below |4.5|. The presented models are just-identified, meaning that there are as many known variables as unknown variables. As just-identified models always yield perfect fit, it should be noted that fit statistics are inappropriate for evaluating the quality of these models. It should also be noted that with the exception of the analyses pertaining to sexual self-schema and own sexual satisfaction, the other analyses are based on data gathered from two interdependent sources, namely two partners within a relationship. For these analyses, the two partners within each couple are treated as a dyad, which is used as the unit of analysis.

Path analysis can be viewed as a specific form of structural equation modeling in which single indicators are used for each of the variables in the model. Individual item responses on the self-schema and sexual satisfaction measures were combined into single score indicators for the respective measures (or two positive/negative scores for the Women's Sexual Self-schema measure). Path analysis was chosen as the method analysis because it allows us to investigate not only direct relationships between the variables, but also allows for the examination of indirect relationships. Thus, if we consider three related variables, A, B, and C; we can examine not only how A directly relates to C, but also how A is indirectly related to C, *through* A's direct relationship to B, and B's direct relationship to C. Note that the previous example is not intended to imply causality, despite the case that structural equation models and path analysis are often thought of as causal models.

Sexual Self-Schemas and Own Satisfaction

As previously discussed, the Women's Sexual Self-Schema measure consists of both a positive sexual self-schema dimension and a negative self-schema dimension, while the Men's Sexual Self-Schema measure assesses only a single positive dimension. To avoid any resulting confusion, results for women in each section will be discussed first, followed by results for men.

We hypothesized that women and men with more positive sexual self-schemas would report greater levels of sexual satisfaction. We found that women whose responses indicated a more positive sexual self-schema reported that they were more sexually satisfied ($\beta = .34, p < .001$). Males who reported more positive sexual self-schemas similarly reported greater levels of sexual satisfaction ($\beta = .25, p < .001$).

We also hypothesized that women with more negative sexual self-schema would report lower levels of sexual satisfaction; however women's sexual satisfaction was not significantly associated with their reports of negative sexual self-schemas ($\beta = .09, p > .05$).

Sexual Self-Schemas and Partner's Satisfaction

We also hypothesized that partners of women with more positive sexual self-schemas would report higher levels of sexual satisfaction, while partners of women with more negative sexual self-schema would report lower levels of sexual satisfaction. However, positive sexual self-schemas were unrelated to women's partner's sexual satisfaction ($\beta = .17, p > .05$), as were negative sexual self-schemas in women ($\beta = .12, p > .05$).

For men, we hypothesized that partners of men with more positive sexual self-schemas would report higher levels of sexual satisfaction, however we found that this association was also not significant ($\beta = .07, p > .05$).

Sexual Self-Schemas and Perceptions of Partner's Satisfaction

We further hypothesized that positive sexual self-schemas would be positively associated with women's perceptions of their partner's sexual satisfaction, even after controlling for their partner's self-reported sexual satisfaction, and the results (see Figure 1) supported this hypothesis, ($\beta = .15, p < .01$). Similarly, it was hypothesized that women with more negative sexual self-schemas would report perceiving their partner's to have lower levels of sexual satisfaction, even after controlling for that partner's actual level of sexual satisfaction, and the results supported this hypothesis as well ($\beta = .16, p < .001$).

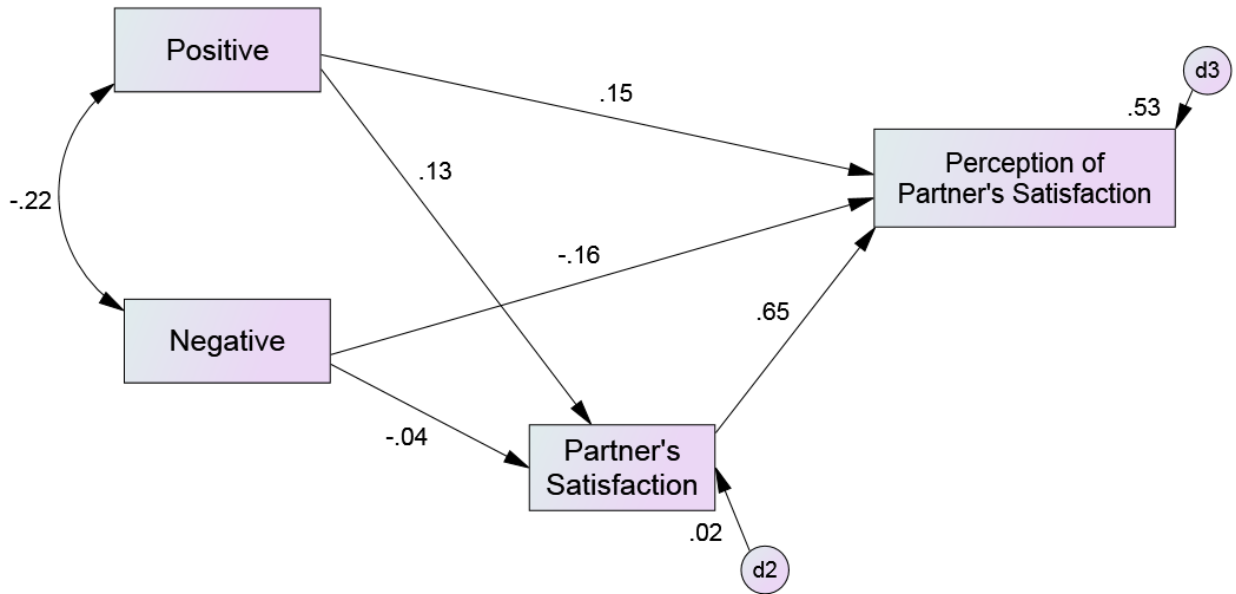


Figure 1. Model of women's sexual self-schema, partner's self-reported sexual satisfaction, and women's perception of their partner's sexual satisfaction.

For men, we hypothesized that positive sexual self-schemas would be positively associated with men's perceptions of their partner's sexual satisfaction, even after controlling for their partner's own self-reported sexual satisfaction, and the results (see Figure 2) supported this hypothesis, ($\beta = .24, p < .01$).

Discussion

The first goal of the current study was to replicate and extend past research on sexual self-schemas by examining the association of between sexual self-schemas and sexual satisfaction in both men and women within a sample of couples in long-term committed relationships. For both men and women, those who have more positive conceptualizations of their own sexuality report a higher level of sexual satisfaction than others with less positive sexual self-conceptualizations.

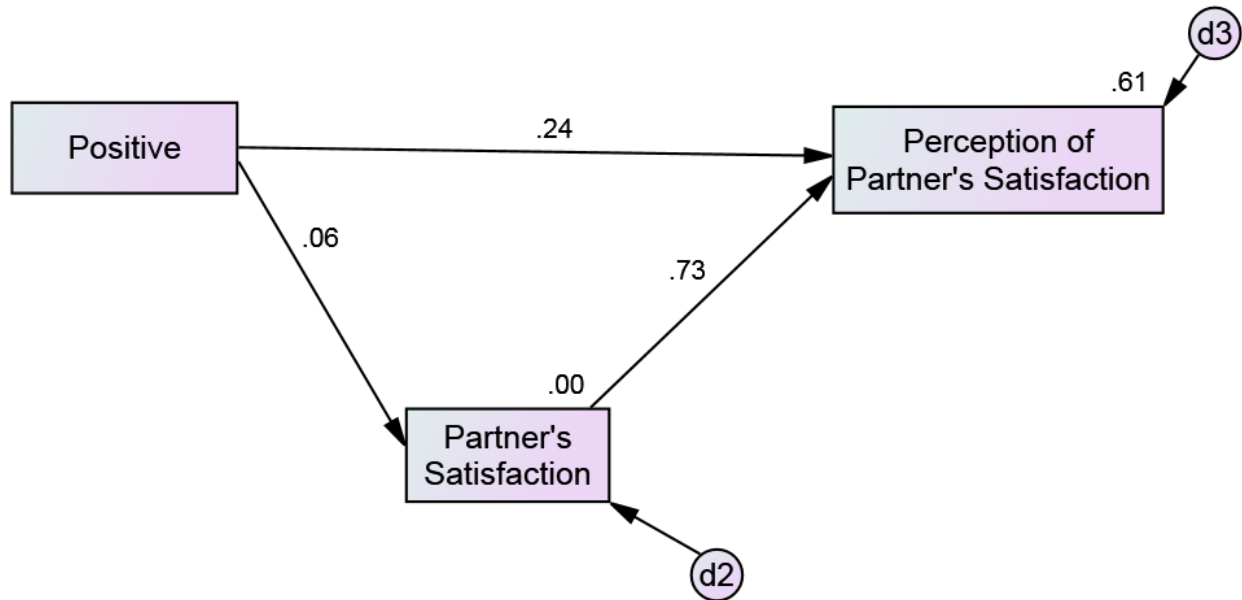


Figure 2. Model of men's sexual self-schema, partner's self-reported sexual satisfaction, and men's perception of their partner's sexual satisfaction.

As we suggested above, it may be that individuals who think of themselves as more sexually confident, capable, and unashamed are able to have more satisfying sexual experiences, or alternatively that those with positive self-views reflect more positively on similar experiences than those who do not. This is consistent with Markus and Wurf's (1987) view on self-concept, and suggests that our self-schemas organize and shape our experiences and how we interact with the world around us. Further, it may be that the causal chain is bidirectional, as individuals who have satisfying sexual experiences may be more likely to develop positive sexual self-schemas, as they adjust their self-schema with each sexual experience.

Contrary to our second hypothesis, participants' own sexual self-schemas did not appear to be related to their partner's reports of sexual satisfaction. If the null findings best describe the relationship between sexual self-schemas and partner's sexual satisfaction, it would suggest that how an individual conceptualizes themselves sexually influences only their own sexual

experience, while how one's partner conceptualizes themselves is not of direct impact to one's own satisfaction. If this is the case it may imply that while some research has suggested that experimentally adopting positive sexual self-schema has benefits for the individual, it may have limited effect on partner's sexual satisfaction (Middleton, Kuffel & Heiman, 2008).

However, our findings are consistent with a larger body of literature suggesting that partner effects, in general, tend to be weaker than actor effects (Kenny and Malloy, 1988). Kenny and Malloy have argued that even when actor effects are present, external factors such the act of participating in a research study may cause participants to focus inward and suppress partner influences. They argue that it may be that when participants are aware that they are being observed, or that their answers will be reviewed by others, that participants may become self-conscious, and more self-focused, reducing the impact of partner effects. Thus, it may be that the present study design was insufficient to detect a partner effect for sexual self-schemas, due to the artificial nature of the study itself, or alternatively because the study was not precise or powerful enough to detect weaker partner effects.

While the present results do not suggest a link between one's own sexual self-schema and partner's sexual satisfaction, we do know that schemas help to organize information from outside world. Thus, our third goal in the present study was to investigate whether how individuals conceptualize themselves sexually was associated with that individual's *perceptions* of their partner's sexual satisfaction. The results suggested that for both men and women, sexual self-schema were associated with perceptions of partner's sexual satisfaction. That is, both men and women who had more positive sexual self-schema also reported that their partners were more satisfied. Importantly, these analyses controlled for partner's self-reported levels of sexual

satisfaction. Thus, positive sexual self-schemas were associated with a positive illusion of their partner's satisfaction.

This finding may be due to the previously discussed research demonstrating that couples frequently hold biased perceptions of one another, or a biased tendency to assume similarity even when it is absent (Kenny & Acitelli, 2001). That is, individuals may make such strong use of projection that the contribution of one's partner's sexual self-schema may not be noticeable.

Past research demonstrates that not only do individuals project their own qualities, characteristics, and values on to their partner, but that this projection leads to biased estimates of the partner (Iafrate, Bertoni, Margola, Cigoli, & Acitelli, 2012; Lemay, Clark, & Feeney, 2007). However, not all biased perceptions are necessarily problematic. For example, perceived similarity with one's partner appears to be associated with reports of higher relationship satisfaction (Acitelli, Douvan & Veroff, 1993), as does perceptions of superiority relative to other couples (Rusbult, Van Lang, Wildschut, Yovetich & Verette, 2000). Similarly, Reis and Shaver (1988) have argued that participants who felt more understood reported feeling more validated and cared for by a partner. Most interestingly, the accuracy of the feeling of understanding was unimportant. Merely the illusion of feeling understood by one's partner was the critical element. Murray, Holmes and Griffin (1996) examined couples longitudinally over a year, and found that partners who held positive illusions about each other reported greater levels of relationship satisfaction. These findings suggest that perceptions may have a profound impact on couple functioning, even over and above the accuracy of those perceptions. If so, then the schemas which guide and shape those perceptions could likewise have an impact on couple functioning, even if they lead to inaccurate perceptions.

However, these perception findings are consistent with the broader literature on relationship functioning that suggests that individuals tend to have biased perceptions of their partners (Kenny & Acitelli, 2001). Indeed, researchers have found that couples often create positive illusions of one another, such as increased perceived similarity, or perceiving oneself to be more understood by one's partner than that partner's own reported levels of understanding (Kenny & Acitelli, 2001; Reis & Shaver, 1988). If so, it may be that partners with positive sexual self-views create rose-coloured glasses when viewing their partner's sexual well-being, which may even lead to benefits in reality. However, these positive illusions may also create difficulties when they are delusional.

Further, the impact of positive illusions seems to be at odds with our intuitive desire for accuracy. While it may be that there are benefits to holding a positive illusion about a partner characteristic, there is a resulting tension between our desire for accuracy and illusory beliefs about one's partner. It may be that there is a cost associated with believing that one's partner is more satisfied than they are, and it may be of interest for future studies to examine this question empirically. Further, many studies have looked at the role of positive illusions in normative samples, whereas the impact of positive illusions could be different in clinical or non-normative populations. It may be that for individuals with very extreme self-schemas, or very biased estimations of satisfaction, the costs associated with positive illusions may be higher.

While this study extended research on sexual self-schemas to a broad community sample of couples in committed relationships, it should be noted that a limitation to the generalizability of the findings is that the present study included only heterosexual couples in committed relationships. Thus, these findings should be extended to couples in newer relationships with caution. It may be useful for future research to investigate whether couples need a minimum

amount of time for sexual self-schema to exert influence on both satisfaction and perceptions of sexual satisfaction. While self-schema arise based on previous experience, it may be that a minimum level of exposure to one another might be required before self-schemas influence partner perceptions. Further, as the present sample included only heterosexual couples, caution should be used when extending these findings to same-sex or transgendered couples.

Additionally, due to the cross-sectional nature of the present study, future research will need to examine this association for causal directionality and the mechanisms of influence. For example, it may be useful to examine couples longitudinally to examine whether sexual self-schema are useful predictors of sexual satisfaction over the long-term, for both individuals and their partners.

Finally, Andersen & Cyranowski (1994) developed the men's and women's sexual self-schema measures to have no face validity, aiming to avoid problems of response bias often associated with sexual measures. However, this introduces a problem of context into the measures for men's and women's sexual self-schemas. For example, an individual might rate themselves highly on the traits "passionate, outspoken, experienced, and conservative." However, so might a researcher, a politician, or a journalist. Without context, it can be difficult to know how participants might be thinking about these items. Within the present study, participants were aware they were being recruited into a study on sexuality in relationships, and were likely cued to the sexual nature of the self-schema measures by the sexual nature of the other measures in the study. However, it may be the case that some participants were thinking either much more generally or alternatively that they were thinking of specific, but sexually irrelevant contexts.

In the current research we found that positive sexual self-schemas were associated with not only with sexual satisfaction, but also perceptions of sexual satisfaction in one's partner. In future research it would be useful to examine these variables in greater depth, to determine how a greater understanding of sexual self-schema may benefit couples. For example, longitudinal studies may allow researchers to examine causal relationships between them, and gain a richer picture in the role of sexual self-schemas in couples' functioning, while further research on the sexual self-schema measures themselves may lead to more precise measurement of individual's sexual self-views.

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Appendix A

Table 1**Sexual Self-Schema (SSS) Studies**

Author, Publication Date	Key Question(s)	Sample Characteristics	Notable Finding(s)
Andersen & Cyranowski (1994)	-Do women have sexual self-schemas?	-8 samples (total N = 1543) of undergraduate women ($M = 20$ years) -2 samples (total N = 49) of older women ($M = 49$ years)	-Creation and validity assessment of Women's SSS
Andersen, Woods & Copeland (1997)	Is sexual self-schema an important individual difference in predicting risk for sexual morbidity?	-61 gynecological cancer survivors ($M = 49$ years, 66% married or living with a partner) -74 gynecologically healthy women ($M = 42$ years, 66% married or living with a partner)	-SSS explained a significant portion of the variance in predicting current sexual behaviour and responsiveness
Wiederman & Hurst (1997)	-Are sexual self-schema related to physical attractiveness, body size and shape, or body image?	-199 undergraduate women ($M = 18.91$ years) -49.7% currently involved in a "serious or exclusive" heterosexual relationship	-SSS were unrelated to body size, shape, dissatisfaction, history of teasing. -SSS were correlated with facial and body attractiveness and degree of avoidance due to concerns about personal appearance.
Andersen, Cyranowski, & Espindle	-Do men have sexual self-schemas?	-9 samples (total N = 1346) of undergraduate men (M	-Creation and validity assessment of Men's SSS

(1999)		= 20 years) -28 of older men ($M = 52$ years)	
Cyranowski & Andersen (1999)	-Tested bivariate model of women's sexual self-schemas	-318 female undergraduates	-Aschematic SSS associated with low reported desire, arousal, anxiety, weak romantic attachments -Coschematic SSS associated with conflicting positive and negative responses to sexual and romantic items
Yurek, Farrar, & Andersen (2000)	-Are sexual self-schemas an important individual difference in female breast cancer survivors?	-190 women who had been diagnoses and treated for breast cancer ($M = 51$ years, 65% married, 7% living with a partner)	-Women with more negative sexual self-schema were more likely to experience sexual disruption and body change stress
Reissing, Yitzchak, Khalife, Cohen & Amsel (2003)	What are etiological correlates of Vaginismus?	-Community sample -87 women ($M = 28$ years) -23% married, 25% living with a partner, 32% dating	-Women with vaginismus reported less positive sexual self-schema
Schover, Fouladi, Warneke, Neese, Klein, Zippe, & Kupelian (2004)	-What factors are related to medical help-seeking in prostate cancer survivors	-1,188 men with Erectile Dysfunction after prostate cancer ($M = 68$ years) -86% married, 6% dating	-SSS did not account for a significant amount of the variance in the final model
Kuffel & Heiman (2006)	-What are the effects of depressive mood symptoms and experimentally adopted sexual self-schemas on women's sexual arousal and affect?	-56 women ($M = 28.8$ years) -7.1% married, 37.5% dating	-Women asked to adopt positive SSS demonstrated significantly greater subjective sexual arousal, vaginal response,

			and positive affect than those asked to adopt negative SSS.
Meston, Rellini, & Heiman (2006)	-Do sexual self-schemas differ between women with and without a history of childhood sexual abuse?	-Community Sample -48 women with a history of childhood sexual abuse ($M = 28$ years, 16% married) -71 women with no history of sexual abuse ($M = 27$ years, 18% married)	-Women who had experienced a history of childhood sexual abuse reported themselves as lower on the <i>Passionate-Romantic</i> factor.
Taylor (2006)	What is the impact of reading <i>Lad</i> and pornographic magazines on men's sexual self-schemas?	-68 male undergraduates ($M = 19.4$ years) -All identified as heterosexual	-Both reading <i>Lad</i> and pornographic magazines was associated with powerful-aggressive sexual self-schema and more permissive sexual attitudes
Hill (2007)	What are differences and similarities in men's and women's sexual self-schemas?	-439 undergraduate men (188) and women (251)	-Development of a modified sexual self-schema measure for both men and women -Suggests both men and women have positive and negative sexual self-schema
Middleton, Kuffel & Heiman (2008)	-What are the effects of experimentally adopted sexual self-schemas on women's sexual arousal and affect in women with Female Sexual Arousal Disorder and healthy controls?	-17 women with Female Sexual Arousal Disorder and 17 sexually healthy women ($M = 31.41$ years)	-Women in both groups asked to adopt positive SSS demonstrated significantly greater subjective sexual arousal, vaginal response and positive affect than those asked to adopt negative SSS.

Carpenter, Andersen, Fowler & Maxwell (2009)	-Are sexual self-schemas a useful variable in identifying gynecological cancer survivors at risk for unfavorable outcomes?	-175 survivors of gynecological cancer diagnoses ($M = 55$ years, 4 years) -91% married (M relationship length 26 years)	-SSS accounted for sig. variance when predicting current sexual behaviour, responsiveness, and satisfaction. -SSS moderated the relationship between sexual satisfaction and negative psychological outcomes
Rellini & Meston (2011)	-Do sexual self-schema play a mediating role in sexual difficulties among women with a history of childhood sexual abuse?	-Community Sample -53 women with a history of childhood sexual abuse ($M = 29.7$ years, 81% married) -50 women with no history of sexual abuse ($M = 25.7$ years, 89% married)	-Negative SSS predicted less sexual satisfaction in women -Higher <i>Passionate-Romantic</i> predicted greater sexual satisfaction
Elder, Brooks, & Morrow (2012)	-How do heterosexual men understand their own sexual self-schemas?	-21 heterosexual men ($M = 34$ years) -27% married, 35% dating, 14% divorced, 24% single	-Development of a model of Sexual Self-Schemas for Heterosexual men
Hall, Morales, Coyne-Beasley & St. Lawrence (2012)	-What are correlates of sexual self-schemas in African-American men?	-133 unmarried, undergraduate African-American men ($M = 22$ years)	-Masculine ideology and cultural centrality were associated with men's SSS
McCallum, Lefebvre, Jolicoeur, Maheu, Lebel (2012)	-What are the subjective experiences for a woman treated for gynecological cancer?	-16 women who had received treatment for gynecological cancer ($M = 51.7$ years) -67% married	-A healthy SSS was one of the most common descriptions of healthy sexuality
Abdolsalehi-Najafi & Beckman (2013)	Are sexual self-schemas related to sex guilt in women?	-65 Iranian-American women ($M = 31.3$ years)	-Women with negative SSS were more likely to report higher levels of sex guilt

Appendix B

Table 2**Zero-Order Correlations Among Key Study Variables.**

	Female Positive Sexual Self- Schema	Female Negative Sexual Self- Schema	Male Sexual Self- Schema	Female's Self- reported Sexual Satisfaction	Female's reports of partner's Sexual Satisfaction	Male's Self- reported Sexual Satisfaction	Male's reports of partner's Sexual Satisfaction
Female Positive Sexual Self-Schema							
Female Negative Sexual Self-Schema	-.22**						
Male Sexual Self-Schema	-.09	.04					
Female's Self-reported Sexual Satisfaction	.36**	-.16*	.06				
Female's reports of partner's Sexual Satisfaction	.27**	-.24**	.09	.90**			
Male's Self-reported Sexual Satisfaction	.13*	-.07	.25**	.69**	.69**		
Male's reports of partner's Sexual Satisfaction	.10*	-.06	.29**	.75**	.70**	.89**	

* Correlation is significant at the 0.05 level

** Correlation is significant at the 0.01 level