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An Interpersonal Investigation of Sexual Self-Schemas

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Abstract A sexual self-schema is a cognitive generalization about sexual aspects of the self. In the current study, we examined how an individual's sexual self-schema influenced the processing of self and partner related sexual information. Specifically, we investigated how sexual self-schemas related to own and partner sexual satisfaction and how they influenced perceptions of partner sexual satisfaction. Participants were 117 heterosexual couples in committed, long-term relationships. Both partners completed measures assessing their sexual self-schemas, their own sexual satisfaction, and perceptions of partner sexual satisfaction. Consistent with our predictions, own sexual schema was associated with own sexual satisfaction. For men, more positive sexual self-schemas were associated with greater sexual satisfaction, and for women, more negative sexual self-schemas were associated with lower sexual satisfaction. For both men and women, there was no significant association between own sexual self-schema and partner sexual satisfaction. Sexual self-schemas directly and indirectly influenced an individual's perception of the partner's sexual satisfaction, such that men and women with more positive sexual self-schemas rated their partners as more sexually satisfied, after controlling for the partner's self-reported level of sexual satisfaction. Our findings demonstrated that sexual self-schemas are relevant to own sexual satisfaction as well as the processing of interpersonally relevant sexual information, specifically one's perceptions of partner sexual satisfaction.

Introduction

A self-schema refers to beliefs and ideas about oneself. Markus (1977) defined self-schemas as "cognitive generalizations about the self, derived from past experience, that organize and guide the processing of self-related information contained in the individual's social experiences" (p. 64). Thus, self-schemas lead to biased processing of information relating to the self such that we selectively attend to, recall, and process information relating to the self in ways that are consistent with our established self-schemas. Further, Markus suggested that an individual has a variety of different knowledge structures, or schemas, about the self and these structures vary by domain.

Building upon the notion that the self is multifaceted (Carver & Scheier, 1981), Andersen and Cyranowski (1994) suggested that one of the central types of schemas humans develop is sexual self-schemas: cognitive generalizations about sexual aspects of the self. They proposed that sexual self-schemas develop as a result of individuals making observations about their own sexual behaviors, sexual emotions, and sexual attitudes and judgments (Andersen & Cyranowski, 1994; Andersen, Cyranowski, & Espindle, 1999). Further, they suggested that individuals make use of these sexual self-schemas to predict how they will act in future situations and how they will make sexual decisions. Andersen et al. (1999) proposed that, conceptually, the content of men's sexual self-views should differ from women's sexual self-views. Based on this assumption, they developed similar but separate sexual self-schema measures for men and women (Andersen & Cyranowski, 1994; Andersen et al., 1999). For the women's sexual self-schema measure, Andersen and Cyranowski (1994) initially found that items formed three

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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. They 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 et al. (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, it was determined 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 from high scorers to low scorers.

The sexual self-schema measures developed by Andersen et al. are related in meaningful and expected ways to other sexual variables and outcomes. 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 behaviors, report higher levels of sexual arousability, and have more extensive sexual repertoires. 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 was distinct from measures of self-esteem, extraversion, positivity, negativity, and social desirability.

Sexual Self-Schemas in an Interpersonal Context

Since Andersen and Cyranowski first developed their sexual self-schema measure, a number of researchers have examined how sexual self-schemas relate to sexual and interpersonal functioning (e.g., Abdolsalehi-Najafi & Beckman, 2013; Yurek, Farrar, & Andersen, 2000). With the exception of research with clinical populations (e.g., cancer survivors, women diagnosed with vaginismus, sexual abuse survivors), the majority of past research on sexual self-schemas has been conducted in younger, primarily undergraduate, samples (e.g., Andersen & Cyranowski, 1994; Andersen et al., 1999; Hill, 2007; Wiederman & Hurst, 1997).[1] Although this research has provided important information about sexual self-schemas, it is conceivable that the role of sexual self-schemas in influencing outcomes such as desire, arousability, and satisfaction may change as individuals

grow older and enter longer, more committed relationships. Consistent with this notion are data suggesting that other aspects of one's sexuality, such as sexual satisfaction, change with age (e.g., Call, Sprecher, & Schwartz, 1995), relationship status (Laumann, Gagnon, Michael, & Michaels, 1994), and the maturation of the relationship over time (Klusmann, 2002). Thus, it is possible the role that sexual self-schemas play in the sexuality of younger individuals may be different from that of older individuals.

Another pattern that emerged when reviewing past research on sexual self-schemas is that all past studies have relied on individual data. There is much that can be learned from investigating sexual self-schemas in a dyadic context and by measuring both partners' sexual self-schemas. For example, questions investigating whether one partner's sexual self-schema is related to the other's sexual behavior can only be examined with data from both partners. Thus, the use of dyadic data allows us to investigate a richer set of questions and helps us better understand the interdependencies inherent in a partnered sexual relationship.

To develop a better understanding of how sexual self-schemas operate in a dyadic context, Research Question 1 examined whether partners' sexual self-schemas were correlated with each other. This was an exploratory question as there are reasons to predict both the existence of an association or a lack thereof. It is possible that individuals are attracted to partners who have similar sexual self-schemas, as such schemas have been shown to correlate with attitudes toward sex, openness/readiness for sexual activity, and sexual arousability. It is also possible that even if two individuals' sexual self-schemas were not correlated at the start of their relationship, they might become more similar over time. For example, if an individual had a negative sexual self-schema and viewed sex as a shameful and embarrassing act, it is possible that, with a partner who had a more positive sexual self-schema, there could be a shift in the individual's sexual self-schema over time in a direction that is more consistent with his or her partner's views. Conversely, it is possible that by the time individuals enter long-term committed relationships, they have fairly stable and well-developed sexual schemas that are resistant to change. Indeed, this is consistent with the idea that a sexual self-schema is based on and shaped by past experiences (Andersen & Cyranowski, 1994). In this case, we would not expect an association between partners' sexual self-schemas.

Research Question 2 examined the association between one's own sexual self-schemas and sexual satisfaction. This association has been investigated in two previous studies, one with an undergraduate sample (Andersen & Cyranowski, 1994) and one with a clinical sample (Rellini & Meston, 2011). Both studies focused exclusively on female participants and found that women with more positive sexual self-schemas reported greater levels of sexual satisfaction than women with more negative self-schemas. To our knowledge, no study has examined whether men's sexual self-schemas are related to their sexual satisfaction. We predicted that both men and women with

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[1] Exceptions to this general trend are studies by Kuffel and Heiman (2006), Elder, Brooks, and Morrow (2012), and Abdolsalehi-Najafi and Beckman (2013).

more positive sexual self-schemas would report higher levels of sexual satisfaction. In addition to the research cited above, this prediction was based on research that has 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 more positive sexual self-schema might reflect more positively on sexual experiences or might be open to more forms of sexual behavior, which may in turn lead to greater levels of sexual satisfaction. As individuals use their sexual self-schemas to make sense of the world, an individual with a more positive sexual self-schema may not only create more satisfying experiences but also judge past experiences to be more satisfying (Markus & Wurf, 1987).

Research Question 3 examined whether one partner's sexual self-schema was associated with the other partner's sexual satisfaction. Given the lack of past research on this question, we did not offer any specific hypothesis and considered this to be an exploratory question.

Sexual Self-Schemas and Perceptions of Partner Sexual Satisfaction

Sexual self-schemas serve as a lens through which sexual information relating to sexual aspects of the self is processed. In a dyadic sexual context, this information includes how an individual interprets a partner's sexual cues, behaviors, and sexual satisfaction. The second overarching goal of the current study was to examine how sexual self-schemas influence an individual's perception of his or her partner's sexual satisfaction (Research Question 4). A better understanding of the factors that influence perception is important because we believe perceptions of partner sexual satisfaction help to guide individuals' and couples' decision making around maintaining versus revising sexual routines and behaviors (Fallis, Rehman, & Purdon, 2014).

How would an individual's sexual self-schema be expected to influence perceptions of partner sexual satisfaction? The function of a sexual self-schema is not only to organize past sexual information relating to the self, but to also inform current and future sexual behavior, preferences, and inferences about sexual events (Andersen & Cyranowski, 1994). Our tendency to selectively attend to and recall information that is consistent with our schemas and to discount information that is inconsistent with our schemas would suggest that individuals with more positive sexual self-schemas would be more motivated to believe that their partners are sexually satisfied and individuals with more negative self-schemas would be more likely to view their partners as sexually dissatisfied. Accordingly, Hypothesis 4a predicted that there would be a direct effect of sexual self-schema on perceptions of partner sexual satisfaction and we

referred to this pathway as representing a *schematic bias* (Fig. 1, pathway e).

An individual's sexual self-schema might also influence perceptions of partner sexual satisfaction indirectly through its influence on the individual's own sexual satisfaction. In Research Question 2, we predicted that an individual's sexual self-schema would be positively associated with his or her sexual satisfaction. Hypothesis 4b builds on Research Question 2 and posited that an individual's sexual self-schema would indirectly influence his or her perception of his or her partner's sexual satisfaction by influencing the individual's own sexual satisfaction, which the individual will project on to the partner, such that more sexually satisfied individuals perceive their partners to be more sexually satisfied and more sexually dissatisfied individuals perceive their partners to be more sexually dissatisfied. We referred to this pathway as *schematic projection* (Fig. 1, pathway a * b). Projection has been investigated and supported in many social contexts and suggests that humans tend to be "egocentric perceivers" (Murray, Holmes, Bellavia, Griffin, & Dolderman, 2002). In the domain of romantic relationships, researchers have found strong, consistent evidence demonstrating that an individual's self-ratings on a particular dimension (e.g., responsiveness to partner) are a strong predictor of their ratings of their partner on the same dimensions, even after controlling for the partner's self-ratings (e.g., Lemay, Clark, & Feeney, 2007; Lemay, Pruchno, & Field, 2006).
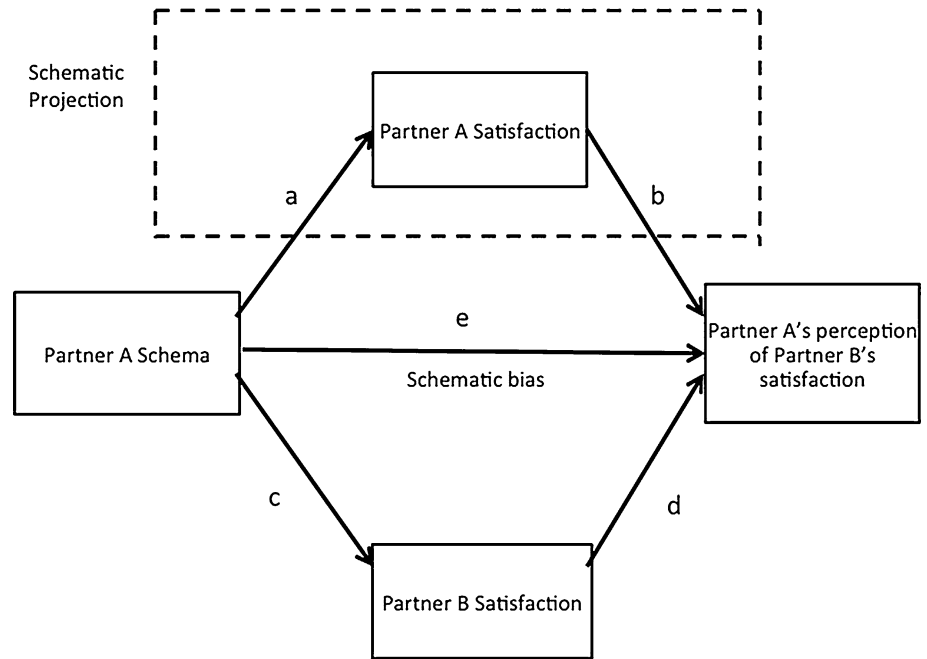
Finally, it is possible that the link between sexual self-schemas and perceptions of partner sexual satisfaction reflects actual partner sexual satisfaction. For instance, to the extent that a female with a positive sexual self-schema has a partner who is more sexually satisfied as compared to a female with a negative self-schema, the association between sexual self-schemas and perceptions of partner sexual satisfaction may be explained by the partner's actual sexual satisfaction. Thus, we estimated schematic bias and projective bias simultaneously while controlling for partners' self-reported sexual satisfaction (Fig. 1, pathway d). In summary, based on the reasoning outlined above, we predicted that we would find support for both *schematic bias* and *schematic projection* controlling for partners' self-report sexual satisfaction.

Method

Participants

A total of 117 couples participated in the present study as part of a larger 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. The advertisement used to recruit participants

Fig. 1 Conceptual representation of schematic projection, schematic bias, and control pathway

stated that couples were needed to "participate in a study investigating how relationship factors influence sexual satisfaction and sexual functioning." The advertisement also described the eligibility criteria, length of study, and remuneration details (all described below).

To be eligible for the study, couples had to be married or cohabiting for a minimum of two years. The two-year minimum for cohabiting couples was chosen to ensure that the two groups (married versus cohabiting) did not differ in their levels of commitment. There were no significant differences between the levels of commitment reported by women who were married ($M = 93.78$, $SD = 1.03$) or cohabiting ($M = 92.28$, $SD = 1.60$), $t(113) < 1$, or between men who were married ($M = 94.42$, $SD = 8.82$) or cohabiting ($M = 94.77$, $SD = 7.11$), $t(112) < 1$.

Both members of the couple were required to be between the ages of 21 and 65 years and both partners had to be willing to participate. 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 new parents tend to experience lowered levels of sexual satisfaction (Ahlborg, Dahlof, & Hallberg, 2005), the female partner must not have given birth during the 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 % of the sample reported being married. Of the couples who participated, 40.17 % 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 ($SD = 3.2$). Of the female participants, 93.1 % 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

Broderick Commitment Scale (Beach & Broderick, 1983)

The Broderick Commitment Scale is a single-item measure that assessed participants' level of commitment to their current relationships on a scale from 0 (*Not at All Committed*) to 100 (*Completely Committed*). It was used for descriptive purposes.

Index of Sexual Satisfaction (ISS; Hudson, Harrison, & Crosscup, 1981)

The Index of Sexual Satisfaction is a 25-item measure of sexual satisfaction. Participants were asked to respond to statements about their sex life, and rate how often those statements applied to them from 1 (*None of the Time*) to 7 (*All of the Time*). Consistent with the recommendations of Hudson et al. (1981), the scores on the ISS were transformed to a 0–100 scale, with higher scores indicating greater sexual dissatisfaction. The scale had high internal consistency for both men (Cronbach's alpha = .95) and women (Cronbach's alpha = .96) in the sample. Participants

completed a second version of the ISS that instructed them to report on their perceptions of their partners' sexual satisfaction. In this version, the items were reworded to ask about one's partner's sexual satisfaction. These scales also had a high level of internal consistency for both men (Cronbach's alpha = .94) and women (Cronbach's alpha = .94). Because higher scores on the ISS correspond to lower levels of sexual satisfaction, the coefficients in the results section have to be interpreted accordingly.

Men's Sexual Self-Schema (Andersen et al., 1999)

The measure of men's sexual self-schema included 27 trait words that assess sexual self-schema (e.g., sensual, arousable) as well as 18 foils (e.g., smart, humorous). Men were asked to rate how well each word described them on a scale from 0 (*Not at All Descriptive of Me*) to 6 (*Very Much Descriptive of Me*). Possible scores range from 0 to 162 with higher scores indicating a more positive sexual self-schema. Within our sample, this measure had a high level of internal consistency (Cronbach's alpha = .84).

Women's Sexual Self-Schema (Andersen & Cyranowski, 1994)

The measure of women's sexual self-schema included 26 trait words (e.g., loving, romantic) as well as 24 foils (e.g., generous, helpful). Women were asked to rate how well each word described them on a scale from 0 (*Not at All Descriptive of Me*) to 6 (*Very Much Descriptive of Me*). Possible scores on the 19 items comprising the positive subscale range from 0 to 114 with higher scores indicating a more positive sexual self-schema. Possible scores from the 7 items comprising the negative subscale range from 0 to 42 with higher scores indicating a more negative sexual self-schema. Both the positive (Cronbach's alpha = .77) and negative (Cronbach's alpha = .61) subscales had an acceptable level of internal consistency in the current sample.

Procedure

Study measures and procedures were reviewed and approved by the Office of Research Ethics. Couples who met the study eligibility criteria and agreed to participate in the study came into the laboratory where they worked with two trained research assistants. After reviewing the letter of information and consenting to participate, participants were taken to separate rooms where they individually completed the study questionnaires. One research assistant was randomly assigned to work with each partner from that point forward. Participants first completed a background questionnaire and then the remaining questionnaires were administered in random order on laptops. Participants also completed a discussion task and other questionnaires pertaining to interpersonal relationships and sexual functioning that were not relevant to the present study. Participants received $50.00 each for their time and were provided with a feedback letter and a list of sexual health resources. The entire study procedure took approximately 3 h.

Results

Descriptive Statistics

Means and SD (see Table 1) and bivariate correlations (see Table 2) for study variables are reported separately for men and women. Measures of men's and women's self-rated sexual satisfaction, perceived partner satisfaction, and sexual self-schemas were significantly correlated.

Research Question 1: Correlational Analysis

Men's sexual self-schemas were not associated with women's positive sexual self-schemas, $r(108) = -.04$, or women's negative sexual self-schemas, $r(108) = .02$.

Research Questions 2–4: Path Analysis

We used structural equation modeling in Mplus 7 (Muthén & Muthén, 1998–2013) to test direct effects of sexual self-schemas on self-reported sexual satisfaction, partners' self-rated sexual satisfaction, and perceived partner sexual satisfaction; and to test direct effects of self-reported sexual satisfaction and partner-rated satisfaction on perceived partner sexual satisfaction. The model also tested indirect effects of sexual self-schemas on perceived partner satisfaction as mediated by self-reported sexual satisfaction and partner-rated sexual satisfaction.

Separate models were estimated for men and women. Positive and negative schemas were allowed to covary in the women's model, and self and partner sexual satisfaction were allowed to covary in both the women's and men's models, as it was expected that these variables would be associated within individuals/ couples. Because these variables were allowed to covary and all possible direct and indirect effects were estimated in the models, the models were saturated and therefore model fit indices were uninformative. Indirect effects were tested using the bootstrapping approach developed by Preacher and Hayes (2008), which, in contrast to conventional approaches to testing mediation, does not assume an indirect effect to have a normal distribution. When using this approach to testing mediation, statistical significance of the indirect effect is determined by inspecting the bootstrapped 95 % confidence interval. Two-tailed *p* values derived from robust SE were used to evaluate the statistical significance of all other effects (e.g., direct effects) in the models. Alpha was set at $p < .05$. Standardized coefficients are presented. Figure 2 shows all direct coefficients from the men's model, Fig. 3 shows all the

Table 1 Descriptive statistics for study variables

	Women		Men	
	M	SD	M	SD
Self-rated sexual dissatisfaction	27.06	18.28[a]	24.55	15.02[a]
Perceived partner sexual dissatisfaction	26.74	15.76[a]	28.35	17.05[a]
Positive sexual schema	77.56	10.46[b]	105.81	15.52[c]
Negative sexual schema	21.46	5.58[d]	Not applicable	

[a] Absolute range 0–100

[b] Absolute range 0–114

[c] Absolute range 0–162

[d] Absolute range 0–42

Table 2 Bivariate correlations between study variables

		1.	2.	3.	4.	5.	6.
1.	Women's self-rated sexual satisfaction						
2.	Women's perceived male sexual satisfaction	.90**					
3.	Men's self-rated sexual satisfaction	.69**	.69**				
4.	Men's perceived female sexual satisfaction	.75**	.70**	.89**			
5.	Women's positive sexual schema	−.36**	−.27**	−.13	−.10		
6.	Women's negative sexual schema	.16	.24*	.07	.06	−.22*	
7.	Men's positive sexual schema	−.06	−.09	−.25**	−.29**	−.09	.04

$N = 117$

$* p < .05; ** p < .01$

direct coefficients from the women's model, and Table 3 provides a complete list of indirect effects tested in the model.[2]

Our prediction for Research Question 2, that more positive sexual self-schemas would be associated with greater sexual satisfaction (Fig. 1, pathway a), was supported for both men and women. Men who endorsed more positive sexual self-schemas self-reported higher levels of sexual satisfaction, $\beta = -.25$, $p < .05$. The same pattern of findings emerged for women's positive sexual self-schemas. Women who endorsed more positive sexual self-schemas were more likely to be sexually satisfied, $\beta = -.34$, $p < .001$. Women's negative sexual self-schemas, however, did not significantly predict their self-reported sexual satisfaction.
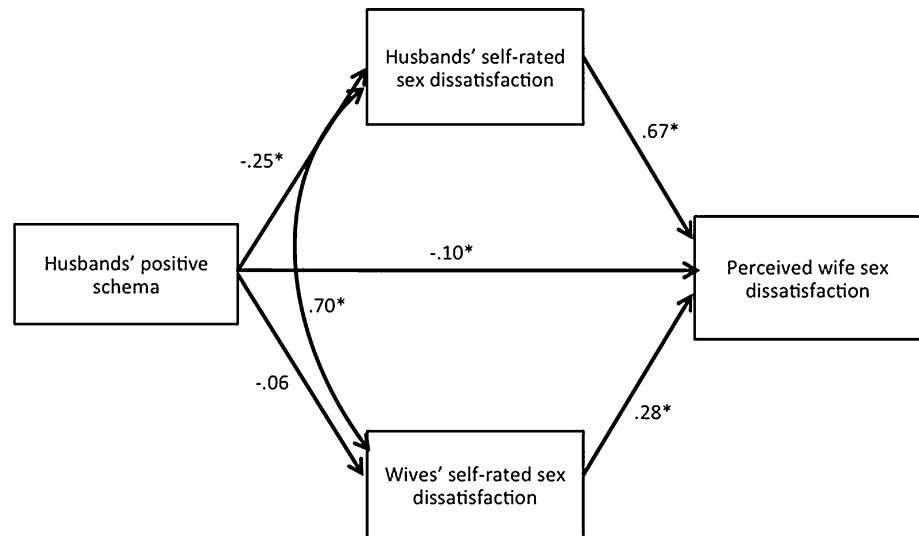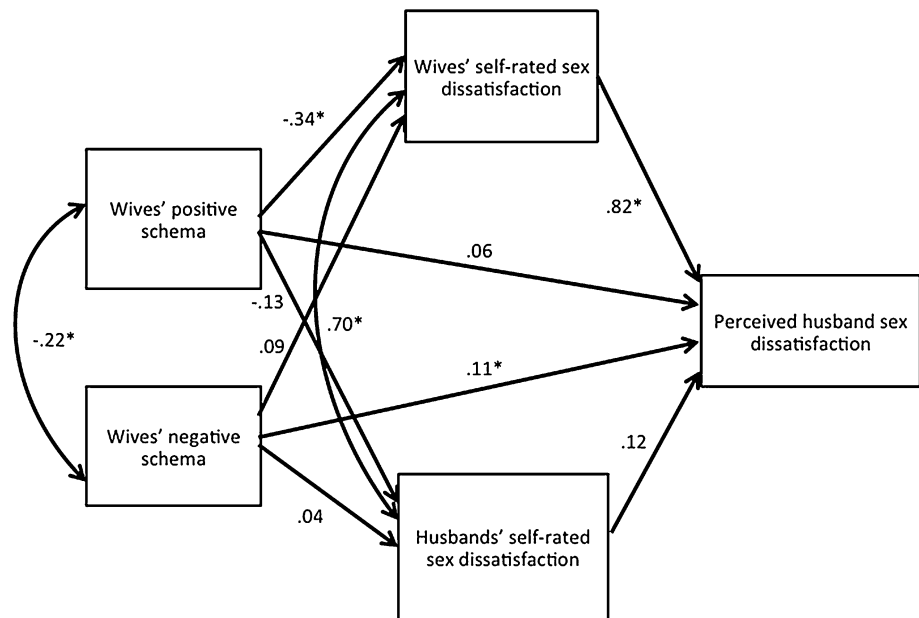
We did not offer a directional hypothesis with regard to Research Question 3, which examined the association between one's own sexual self-schema and one's partner's sexual satisfaction (Fig. 1, pathway c). We found that men's sexual self-schemas were not associated with women's self-rated sexual satisfaction nor did women's positive or negative sexual self-schemas have a significant effect on men's self-rated sexual satisfaction.

With regard to Research Question 4, a significant direct effect of sexual self-schemas on perceived partner sexual satisfaction would be consistent with a *schematic bias* (Hypothesis 4a; Fig. 1, pathway e), and a significant indirect effect of sexual self-schemas on perceived partner satisfaction through self-reported satisfaction would be consistent with a *projective bias* (Hypothesis 4b; Fig. 1, pathway a*b). These effects were estimated controlling for partner's self-rated satisfaction (Fig. 1, pathway d).

The results showed support for schematic bias for both men and women. Specifically, men who endorsed more positive sexual self-schemas were more likely to perceive their partners as sexually satisfied, $\beta = -.10$, $p < .05$. Women who were more likely to endorse negative sexual self-schemas perceived their partners as less sexually satisfied, $\beta = .11$, $p < .001$. Women's positive sexual self-schemas, however, did not significantly predict their perceptions of their partners' sexual satisfaction.

With regard to projective bias, we first reviewed the results for the direct effects of self-reported sexual satisfaction on perceptions of partner satisfaction and then described tests of the indirect effects that comprise projective bias. We found that men's self-reported sexual satisfaction had a positive effect on their perceptions of their female partners' sexual satisfaction, $\beta = .67$, $p < .001$, and women's self-reported sexual satisfaction also had a statistically significant, positive effect on women's

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[2] Note that lower, rather than higher, scores on the ISS correspond to greater sexual satisfaction. Thus, the direction of the coefficients should be interpreted accordingly.

Fig. 2 Standardized coefficients from husbands' model. *$p < .05$

Fig. 3 Standardized coefficients from wives' model. *$p < .05$

perceptions of their male partners' sexual satisfaction, $\beta = .82$, $p < .001$. Testing of the indirect effects provided support for projective bias for both men and women. Specifically, men who endorsed more positive sexual self-schemas were more likely to estimate their female partners as sexually satisfied indirectly through the positive effect of men's positive schemas on their own sexual satisfaction, $\beta_{indirect} = -.17$, 95 % CI $[-.29, -.04]$. Similarly, women with more positive sexual self-schemas were more likely to estimate their partners as sexually satisfied indirectly through the positive effect of women's positive sexual self-schemas on women's self-reported sexual satisfaction, $\beta_{indirect} = -.28$, 95 % CI $[-.44, -.11]$. Women did not demonstrate a projective bias of their negative sexual self-schemas via their own sexual satisfaction. These direct and indirect effects were found controlling for the effects of one's partner's self-

reported level of sexual satisfaction on perceptions of sexual satisfaction.

Discussion

The overarching goal of the current study was to better understand the role of sexual self-schemas in predicting interpersonally relevant sexual outcomes. In Research Question 1, we examined whether partners' sexual self-schemas were significantly correlated. Our results showed that partners' sexual self-schemas were not related to each other. This finding was consistent with past theoretical (e.g., Andersen & Cyranowski, 1994) and empirical work (Riso et al., 2006) suggesting that self-schemas tend to be fairly stable and enduring beliefs about

Table 3 Indirect effects tested in path analyses

	Standardized coefficient	95 % Confidence interval
Men's model		
Positive schema → self-rated satisfaction → perceived partner satisfaction	−0.17*	−0.29, −0.04
Positive schema → partners' self-rated satisfaction → perceived partner satisfaction	−0.02	−0.08, 0.05
Women's model		
Positive schema → self-rated satisfaction → perceived partner satisfaction	−0.28*	−0.44, −0.11
Positive schema → partners' self-rated satisfaction → perceived partner satisfaction	−0.02	−0.05, 0.02
Negative schema → self-rated satisfaction → perceived partner satisfaction	0.07	−0.07, 0.21
Negative schema → partners' self-rated satisfaction → perceived partner satisfaction	0.01	−0.02, 0.03

* $p < .05$

the self. It is important to keep in mind that our sample consisted of adults in committed, long-term relationships, and by the time individuals enter such relationships, their sexual self-schemas are likely to have been crystallized based on their sexual history and experiences. Our findings should not be generalized to younger samples, particularly individuals who are at the stage when their sexual self-schemas are being developed. At the stage when sexual self-schemas are being developed, there may be greater influence of partner sexual schemas and a significant association between the sexual schemas of two partners.

In Research Question 2, we replicated and extended past research by examining the association between sexual self-schemas and sexual satisfaction. Men and women who reported more positive conceptualizations of their own sexuality tended to report higher levels of sexual satisfaction. The design of the current study did not allow us to comment on the direction of this association; it may be that individuals who have more satisfying sexual experiences over time tend to develop more positive sexual self-schemas. Alternatively, it may be that individuals who think of themselves as more sexually confident and skilled are able to have more satisfying sexual experiences, or that individuals with more positive sexual self-schemas may reflect more positively on their sexual experiences, which do not differ substantially from those of people with less positive sexual self-schemas. This latter alternative 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.

With regard to Research Question 3, we did not find a significant association between one's own sexual self-schema and one's partner's sexual satisfaction for men or women. Our results suggest that how an individual conceptualizes himself or herself sexually influences his or her own sexual satisfaction but may not influence that of his or her partner. It would be premature to conclude, based on this finding, that one partner's sexual self-schema has no bearing on the other partner's sexual outcomes. It may be that schemas influence other relational and sexual outcomes for the partner, processes that were not assessed in the current study. In general, dyadic research reveals a pattern

such that partner effects tend to be weaker than actor effects (Kenny & Malloy, 1988). Further, Kenny and Malloy have argued that even when actor effects are present, external factors, such as the act of participating in a research study, may cause participants to focus inward and suppress partner influences.

Schema theory predicts that individuals should filter information from the external world in ways that are consistent with their schemas. There is a large body of evidence that supports this function of schemas. For example, individuals with negative core beliefs about themselves tend to view neutral or even positive information as negatively valenced (e.g., Beck, 1967). Consistent with this theory and empirical evidence, individuals with more positive sexual self-schemas should interpret information about their sexual relationship and sexual partners in ways that confirm their conceptualizations of their sexual selves. In Research Question 4, we examined whether sexual self-schemas were related to perceptions of one's partner's sexual satisfaction. We examined the direct pathway from an individual's own sexual self-schema to his or her perception of the partner's sexual satisfaction (labeled *schematic bias*) as well as the indirect pathway from own sexual self-schema → own sexual satisfaction → partner sexual satisfaction (labeled *schematic projection*). We estimated the direct and indirect pathway simultaneously while controlling for the partner's self-reported sexual satisfaction.

Our findings largely supported our hypotheses as we found evidence to support both *schematic bias* and *schematic projection*. The *schematic bias* findings showed that men with more positive sexual self-schemas perceived their partner as more sexually satisfied. We controlled for the partner's actual sexual satisfaction, ruling out the possibility that the association was driven by individuals with positive sexual self-schemas having partners who were more sexually satisfied. Data from women supported a negative *schematic bias*, such that women who endorsed more negative sexual self-schemas perceived their partners as less sexually satisfied. Here again, our analyses controlled for the partner's self-reported sexual satisfaction.

Much of the past research on sexual self-schemas has focused on how they are related to individual level sexual outcomes, such

as sexual behavior (e.g., Andersen & Cyranowski, 1994), responsiveness (e.g., Andersen, Woods, & Copeland, 1997), and sexual arousal (e.g., Kuffel & Heiman, 2006). When interpersonal outcomes have been examined, they have focused on broader, global constructs, such as experiences of romantic love (e.g., Andersen & Cyranowski, 1994) and sexual satisfaction (e.g., Rellini & Meston, 2011). Our findings support the notions that sexual self-schemas are relevant to understanding an individual's own sexual satisfaction, that they are a lens through which individuals interpret sexually relevant information from their partners and, importantly, individuals view this information in ways that are consistent with their own conceptualizations of their sexual selves.

Our results also supported the *schematic projection* pathway for both men and women. Both men and women with more positive sexual self-schemas were more likely to perceive their partners as sexually satisfied because they projected their own satisfaction on to their partners. These findings were consistent with past research on partner perceptions, which show that romantic partners 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; Murray, Holmes, & Griffin, 2003; Reis & Shaver, 1988).

The current study demonstrated that sexual self-schemas introduce bias into estimates of partner sexual satisfaction but did not speak to whether this bias is dysfunctional or adaptive. The literature on positive illusions tends to show a range of positive individual and relational benefits of holding positive illusions about one's partner (Murray et al., 2003). 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 sexually satisfied than he or she is (Fallis et al., 2014), and it may be of interest for future studies to examine this question empirically. Further, many studies that have examined the role of positive illusions have done so in normative samples, whereas the presence of and impact of positive illusions could be different in clinical or non-normative populations, with degree of bias determining its functional impact.

While this study extended research on sexual self-schemas to a broad community sample of couples in committed relationships, a limitation to the generalizability of the findings is that the present study included only heterosexual couples in committed relationships. Also, these findings should be extended to couples in newer relationships with caution. It may be that a certain amount of time is required for sexual self-schemas to exert influence on both satisfaction and perceptions of sexual satisfaction. Additionally, the cross-sectional nature of the present study limits our ability to draw conclusions about the directionality of our findings; however, both theory (e.g., Beck, 1967) and

data (e.g., Kuffel & Heiman, 2006) from other studies support the direction of associations suggested in the current study (i.e., schemas predicting individual and relational outcomes).

In the current study, we replicated past studies by showing that for both men and women, more positive sexual schemas were associated with higher levels of sexual satisfaction. We extended past research by examining *how* sexual self-schemas might influence a sexual outcome, an individual's perception of his/her sexual satisfaction. Our findings underscore the role of sexual self-schemas in shaping an individual's processing of sexually relevant information.

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