

Sexual Narcissism and Infidelity in Early Marriage

James K. McNulty · Laura Widman

Received: 15 March 2013 / Revised: 13 May 2013 / Accepted: 28 December 2013 / Published online: 3 April 2014
© Springer Science+Business Media New York 2014

Abstract There is theoretical reason to believe that narcissism is associated with infidelity. Yet, studies that have examined this association have yielded inconsistent results. Given that these inconsistencies may have emerged because prior studies used global assessments of narcissism that do not capture the extent to which the components of narcissism are activated in the sexual domain, the current research drew from two longitudinal studies of 123 married couples to examine the extent to which sexual narcissism predicted marital infidelity. Consistent with the idea that narcissism predicts sexual behavior when activated in the sexual domain, own sexual narcissism was positively associated with infidelity, controlling for own marital and sexual satisfaction, own globally-assessed narcissism, partner globally-assessed narcissism, and partner sexual narcissism. Helping to explain why this association emerged, further analyses demonstrated that it was driven by all four facets of sexual narcissism—sexual exploitation, grandiose sense of sexual skill, sexual entitlement (Study 1 only), and lack of sexual empathy (husbands only). Additionally, although partner sexual narcissism was unrelated to infidelity on average, partners' grandiose sense of sexual skill and partners' sexual entitlement (Study 2 only) were positively associated with infidelity, and partners' lack of sexual empathy was negatively associated with infidelity

(Study 2 only). These findings highlight the benefits of using domain-specific measures of sexual narcissism in research on sexual behavior and the benefits of using domain-specific measures of personality more generally.

Keywords Sexual narcissism · Narcissism · Infidelity · Personality · Marriage

Introduction

Sexual infidelity can have serious negative consequences for those involved.¹ Not only is infidelity associated with decreased relationship satisfaction in both partners (Sánchez Sosa, Hernández Guzmán, & Romero, 1997; Spanier & Margolis, 1983), it has been identified as one of the most common predictors of divorce (Amato & Rogers, 1997; Betzig, 1989). Further, those who commit infidelity and their partners also frequently experience negative intrapersonal outcomes, such as decreased self-esteem (Shackelford, 2001) and increased psychological distress (e.g., Allen et al., 2005; Cano & O'Leary, 2000; but see Hall & Fincham, 2009 for evidence that psychological distress predicts infidelity).

Unfortunately, infidelity is quite common. Estimates suggest that over 25 % of married men and 20 % of married women engage in extra-marital sex over the course of their relationships (Atkins, Baucom, & Jacobson, 2001; Greeley, 1994; Laumann, Gagnon, Michael, & Michaels, 1994; Wiederman, 1997). Identifying psychological characteristics associated with committing infidelity may help interventions to better target couples

J. K. McNulty (✉)
Department of Psychology, Florida State University, 1107 W. Call
St., Tallahassee, FL 32306-4301, USA
e-mail: mcnulty@psy.fsu.edu

L. Widman
Division of Infectious Diseases, School of Medicine, University of
North Carolina, Chapel Hill, NC, USA

L. Widman
Department of Health Behavior and Health Education, Gillings
School of Global Public Health, University of North Carolina,
Chapel Hill, NC, USA

¹ Throughout this article, we use the phrase sexual infidelity to refer to extra-dyadic sexual relations that occur in the context of committed relationships presumed to be monogamous rather than extra-dyadic sexual relations that are accepted as part of open or polyamorous relationships.

most at risk for experiencing infidelity and thus help reduce its frequency.

One approach to identifying those at risk for infidelity has been to identify stable personality traits of individuals who commit infidelity. There are several reasons to believe that one trait associated with infidelity is narcissism (see Widman & McNulty, 2011)—a multifaceted personality style characterized by tendencies toward exploiting others, a general lack of empathy for others, and a pervasive confidence in one's abilities (see Campbell, Foster, & Finkel, 2002; Raskin & Terry, 1988). First, narcissists tend to be oriented toward sexual relationships (Hurlbert, Apt, Gasar, Wilson, & Murphy, 1994; Wryobeck & Wiederman, 1999), an orientation that may lead them to seek sex from people other than their primary partners. Second, narcissism is positively associated with having an unrestricted sociosexuality (Jonason, Li, Webster, & Schmitt, 2009)—i.e., having more permissive attitudes toward casual sex (Simpson & Gangestad, 1991), which itself is associated with increased likelihood of infidelity (e.g., Mattingly et al., 2011). Third, narcissists hold relatively positive beliefs regarding their skills and abilities (Campbell, Bosson, Goheen, Lakey, & Kernis, 2007; Morf & Rhodewalt, 2001), beliefs that may lead them to think alternative partners will accept and benefit from their sexual advances. Fourth, narcissists are characterized by high levels of exploitativeness (e.g., Raskin, Novacek, & Hogan, 1991) and low levels of empathy (e.g., Watson, Grisham, Trotter, & Biderman, 1984), a combination of characteristics that may lead them to be more deceitful and less remorseful in their quests to gain alternative sexual partners. Finally, narcissism is associated with lower levels of relationship commitment (Campbell & Foster, 2002; Foster, Shrira, & Campbell, 2006), which itself is associated with a greater likelihood of infidelity (DeWall et al., 2011; Drigotas, Safstrom, & Gentilia, 1999).

Indeed, several studies provide support for the idea that people high in narcissism are more likely to commit infidelity. Providing indirect evidence for such a link, Buss and Shackelford (1997) reported that narcissism was positively associated with married men and women's reports of the probability that they would commit infidelity. Buss and Shackelford did not specifically examine actual infidelities. Providing additional indirect evidence for a link between narcissism and infidelity, Campbell, Foster, & Finkel (2002) asked participants to describe two previous relationships, one with a narcissistic partner and one with a non-narcissistic partner, and reported that participants were more likely to report an infidelity when describing the narcissistic partner. Two other studies provide more direct evidence for a link between narcissism and infidelity. Hunyady, Josephs, and Jost (2008) reported that participants' reports of narcissism were correlated with their reports of whether they had ever committed an infidelity as well as how many times they had done so. Atkins, Yi, Baucom, and Christensen (2005) used a sample of clients seeking marital therapy to demonstrate that clients' reports of

narcissism predicted whether they reported having committed an infidelity in their current relationship.

Inconsistencies in Prior Research

One limitation of the evidence supporting an association between narcissism and infidelity is that at least three other studies have failed to demonstrate such an association. Wiederman and Hurd (1999) reported no significant association between infidelity and the entitlement and exploitativeness subscales of the commonly-used Narcissistic Personality Inventory (NPI) (Raskin & Terry, 1988). Jones and Weiser (2014) reported no significant association between infidelity and participants' reports on the entire NPI once the variance common to psychopathy and Machiavellianism was controlled. Wreford (2012) reported no significant association between narcissism and a composite of four items assessing infidelity: kissing, engaging in oral sex, manually stimulating, or having sex with someone other than the partner. Although a meta-analytic review could provide a better understanding of the association between narcissism and infidelity, even this cursory review reveals that some inconsistencies in that association have emerged.

One way to reconcile these inconsistencies comes from recognizing and understanding inconsistencies in the link between personality and behavior (for reviews of such inconsistencies, see Bem & Allen, 1974; Epstein, 1979; Mischel & Peake, 1982). Mischel and Shoda (1995) provided an understanding of such inconsistencies by noting that (1) personality only predicts behaviors in situations that activate the personality system and (2) not all situations activate the personality system. The same may be true regarding the extent to which narcissism predicts sexual functioning. Sexual situations may not activate the narcissistic personality components in some narcissists and the extent to which they do may determine whether narcissism predicts sexual behavior. However, the global assessments of narcissism that are typically used in research on the association between narcissism and infidelity capture the extent to which narcissistic tendencies are activated across situations on average, not the extent to which such tendencies are specifically activated by sexual situations.

Given these issues, one way researchers may demonstrate more consistent links between narcissism and infidelity is by using measures that specifically assess the extent to which narcissistic personality characteristics are activated in the sexual domain. Recent empirical research provides evidence of the clarity such measures can provide. Widman and McNulty (2010) developed and used a domain-specific measure of sexual narcissism, the sexual narcissism scale (SNS), to resolve the inconsistencies observed between narcissism and sexual aggression. The SNS captures the extent to which four important components of narcissism are activated in sexual domains: sexual

entitlement, sexual exploitation, low sexual empathy, and an inflated sense of sexual skill. Whereas globally-assessed narcissism was inconsistently associated with various measures of sexual aggression in that research, sexual narcissism was consistently associated with such measures. Likewise, McNulty and Widman (2013) demonstrated that although globally assessed narcissism was unassociated with trajectories of sexual and marital satisfaction over the first few years of marriage, sexual narcissism was negatively associated with both trajectories. Sexual narcissism may similarly provide a more consistent picture of the association between narcissism and infidelity.

Facets of Narcissism

A second limitation of prior research on narcissism and infidelity is that no prior work has demonstrated which specific facets of narcissism are related to infidelity. Most measures of narcissism assess different facets, or components, of the narcissistic personality system. For example, the NPI assesses facets such as exploitativeness, entitlement, and superiority. It is possible that any association that emerges between narcissism and infidelity emerges due to one or several of these facets. Examining links between these facets and infidelity could provide valuable information regarding the specific psychological processes involved in infidelity. That is, each facet represents a unique set of psychological processes that may or may not predict infidelity. Although narcissists tend to report high levels of entitlement, exploitativeness, and skill, it is unclear whether one or all of these processes are associated with infidelity.

The recent work by McNulty and Widman (2013) examining the link between sexual narcissism and sexual and marital satisfaction demonstrated that examining such facets can be insightful. Although that research demonstrated that spouses' total scores on the SNS were negatively associated with sexual and marital satisfaction on average, each facet of sexual narcissism was related to both sexual and marital satisfaction and sometimes in opposite directions. Although own sexual exploitation, own and partner sexual entitlement, and own and partner lack of sexual empathy were each negatively associated with sexual and marital satisfaction, own and partner sense of sexual skill were each positively associated with sexual and marital satisfaction.

Partner Narcissism

Finally, we are aware of only one study that has examined the implications of partner narcissism for the likelihood of infidelity. In addition to demonstrating that people higher in narcissism were themselves more likely to report having committed an infidelity in the past, Hunyady et al. (2008) demonstrated that people higher in narcissism were also more likely to report that their partners had committed an infidelity.

Nevertheless, this research did not examine the specific facets involved in this association.

Overview of the Current Research

We drew on data from two longitudinal studies of newly married couples to examine the associations between own and partner sexual narcissism and infidelity. In both studies, both members of the couple reported on their global narcissism and sexual narcissism and, every 6 months for approximately the first 4 years of marriage, both members of the couple also reported on their own and their partner's infidelities. We predicted that own sexual narcissism and each of its four facets would be positively associated with infidelity. We also examined the association between partner sexual narcissism and infidelity, but made no strong predictions regarding the associations that may emerge. Given that both studies used nearly identical methods, we analyzed them simultaneously.

Method

Participants

Participants in Study 1 were 37 newlywed couples drawn from a larger longitudinal study of 72 newlywed couples in northern Ohio (see McNulty & Fisher, 2008); participants in Study 2 were 86 newlywed couples drawn from a larger study of 135 newlywed couples in eastern Tennessee (see McNulty & Russell, 2010); three husbands in Study 2 did not complete all the relevant measures and were thus not included in the analyses. These subsets of couples were used because they were the only ones who completed the phase of measurement that included the newly developed measure of sexual narcissism (for a report on the association between these couples' sexual narcissism and sexual and marital satisfaction, see McNulty & Widman, 2013).

At baseline, husbands were 25.42 years old ($SD = 4.19$) and had completed 15.75 years of education ($SD = 2.65$); wives were 24.19 years old ($SD = 4.19$) and had completed 17.82 years of education ($SD = 2.82$). The median income, combined across spouses, was between \$40 K and \$50 K. The majority of participants (>90 %) were Caucasian.

Procedure

At baseline in both studies, participants were mailed a packet of questionnaires to complete at home and bring with them to a laboratory session where they completed a consent form approved by the local human subjects review board and participated in a variety of tasks beyond the scope of the current analyses. The packet contained self-report measures of sexual

satisfaction, marital satisfaction, and infidelity, as well as a letter instructing couples to complete their questionnaires independently of one another and separate sealable envelopes to protect the privacy of spouses' completed surveys.

In Study 1, this initial packet also contained a global measure of narcissism. Six more times, approximately every 6–8 months, participants in both studies were again mailed a packet of questionnaires that contained the same measures of sexual satisfaction, marital satisfaction, and infidelity. At the final assessment in Study 1 (approximately 4 years into the marriage) and the third assessment in Study 2 (approximately 1 year into the marriage), the packet additionally contained the measure of sexual narcissism. In Study 2, this packet also contained the same global measure of narcissism used at baseline in Study 1. Sexual narcissism was first included at these assessments because they were the first assessments in each study that occurred after the scale was developed. Although assessing sexual narcissism so late in each study was not ideal, the stability of personality traits over relatively short periods of time (see Caspi, Roberts, & Shiner, 2005) suggests the levels of sexual narcissism observed at these times should be similar to those that would have been observed in the beginning of marriage. Participants were paid \$60 (Study 1) or \$80 (Study 2) for participating in the baseline phase of data collection and \$50 (in both studies) for participating in subsequent phases.

All 243 spouses or their partners provided data on infidelity at least two times: 139 spouses or their partners (57.2 %) reported on infidelity at all 7 waves; 56 (23.0 %) reported at 6 waves; 15 (6.2 %) reported at 5 waves; 16 (6.6 %) reported at 4 waves; 15 (6.2 %) reported at 3 waves; and 2 (0.8 %) reported at just two waves. Thus, analyses were based on all 243 spouses and predicted whether or not they or their partner reported an infidelity at any point during the study.

Measures

Sexual Narcissism

Sexual narcissism was assessed with a version of the SNS, modified for use with married spouses (SNS-M) (McNulty & Widman, 2013, see also Widman & McNulty, 2010). Specifically, whereas many of the items in the original SNS assessed narcissistic thoughts and behaviors with reference to sexual partners in general, those items were changed to assess those thoughts and behaviors with reference to the marital partner in the SNS-M (e.g., “I really know how to please a partner sexually” was changed to “I really know how to please my spouse sexually”). Like the SNS, the SNS-M consisted of 20 items that assessed four components of narcissism hypothesized to be active in the sexual domain: (1) sexual exploitation, (2) sexual entitlement, (3) lack of sexual empathy, and (4) grandiose sense of sexual skill.

Items on the Sexual Exploitation subscale assessed the ability and willingness to manipulate the spouse to gain sexual access (e.g., “I could easily convince my spouse to have sex with me if he or she was unwilling”). Items on the Sexual Entitlement subscale assessed the belief that the fulfillment of one's sexual desires is a personal right (e.g., “I feel I deserve sexual activity when I am in the mood for it”). Items on the Lack of Sexual Empathy subscale assessed a general lack of empathy and devaluation of the spouse in sexual situations (e.g., “The feelings of my spouse during sex don't usually concern me”). Items on the Sexual Skill subscale assessed a tendency to hold a grandiose sense of sexual skill or an exaggerated sense of sexual success (e.g., “I really know how to please my spouse sexually”). Participants responded to all items on a 5-point scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*). After reversing appropriate items, all items were averaged to form the total scale score and appropriate items were averaged to form each subscale. Higher scores indicated higher levels of sexual narcissism. Prior research confirms the internal reliability (full scale coefficient alphas ranged from .75 to .86 for men and women in college and community samples) and the four-factor structure of both the SNS (Widman & McNulty, 2010) and the SNS-M (McNulty & Widman, 2013). Internal consistency was also acceptable in the current samples (for husbands, coefficient alpha was .82 for the total scale, .72 for sexual exploitation, .81 for sexual entitlement, .75 for low sexual empathy, and .75 for sexual skill; for wives, coefficient alpha was .75 for the total scale, .63 for sexual exploitation, .75 for sexual entitlement, .66 for low sexual empathy, and .73 for sexual skill).

As reported in McNulty and Widman (2013), these participants' reports of sexual narcissism were positively correlated across subscales, with the exception that sense of sexual skill was unrelated to sexual exploitation and negatively related to lack of sexual empathy among husbands and sense of sexual skill was unrelated to all other subscales among wives. Scores ranged from $M = 1.82$ ($SD = 0.55$) for low sexual empathy to $M = 3.47$ ($SD = 0.73$) for sense of sexual skill for husbands and from $M = 1.66$ ($SD = 0.50$) for low sexual empathy to $M = 3.30$ ($SD = 0.67$) for sense of sexual skill for wives.

Narcissism

Global narcissism was assessed with the forced-choice version of the 40-item NPI (Raskin & Terry, 1988). This version of the NPI asks participants to agree or disagree with items such as “If I ruled the world, it would be a much better place” and “I find it easy to manipulate people” using a yes–no response format. A total score was calculated for each participant, with higher scores indicating higher levels of narcissism. Internal consistency was adequate (for husbands, $M = 19.18$, $SD = 7.06$, $\alpha = .87$; for wives, $M = 17.20$, $SD = 6.37$, $\alpha = .84$).

Infidelity

Infidelity was assessed at every assessment using two items included in a version of the Stressful Events Checklist (Sarason, Johnson, & Siegel, 1978). One item asked participants to indicate whether or not they “had a romantic affair/infidelity” in the past 6 months. The other item asked participants if they found out that their “spouse had been unfaithful” in the last 6 months. We capitalized on having both partners’ reports of the same behavior by creating a dummy-code of infidelity that was based on both partners’ reports. Specifically, a spouse was coded with a 0 if neither the spouse nor his or her partner reported that the spouse had engaged in an infidelity on any assessment and with a 1 if the spouse and/or his or her partner reported that the spouse had engaged in an infidelity on any assessment. Spouses’ reports were significantly but only moderately correlated, $r = .30$, $p < .001$.

Sexual Satisfaction

Given that sexual satisfaction has been associated with both infidelity (Atkins et al., 2005) and sexual narcissism (McNulty & Widman, 2013), we assessed and controlled for spouses’ satisfaction with their sexual relationships using the Index of Sexual Satisfaction (ISS) (Hudson, 1998). The ISS measures intimates’ satisfaction with their sexual relationships by asking them to indicate the extent to which 25 statements describe their current sexual relations with their partner (e.g., “I think that our sex is wonderful,” “Our sex is monotonous” [reversed]) on a scale of 1 (*None of the time*) to 7 (*All of the time*). Responses to these items were reversed when appropriate and summed to form an index of sexual satisfaction that ranged from 25 to 175, with higher scores indicating higher levels of sexual satisfaction. Participants’ completed the ISS at every assessment and their reports across all assessments were averaged to form an estimate of the level of sexual satisfaction experienced by each spouse over the course of the first several years of marriage, which was controlled in the primary analyses. Internal consistency of this measure was adequate across phases (coefficient alpha was at least .88 for both husbands and wives at each assessment).

Marital Satisfaction

Given that marital satisfaction has also been associated with both infidelity (Russell, Baker, & McNulty, 2013) and sexual narcissism (McNulty & Widman, 2013), we also assessed and controlled for spouses’ satisfaction with the marriage. Most commonly-used measures of marital satisfaction, such as the Dyadic Adjustment Scale (Spanier, 1976), combine items that assess spouses’ global sentiments toward the marriage with items that assess their levels of conflict and agreement (for a more in-depth discussions of this issue, see Fincham & Bradbury, 1987). To avoid confounding satisfaction with specific

processes that may be related to infidelity, narcissism, and/or sexual narcissism in the current research, we used a measure of satisfaction that assessed spouses’ global sentiments toward the relationship exclusively: the Quality Marriage Index (QMI) (Norton, 1983). This instrument asks spouses to indicate their level of agreement with five items that describe the general quality of the marriage (e.g., “We have a good marriage”) using a 7-point scale (1 = *Very Strong Disagreement*, 7 = *Very Strong Agreement*) and to rate the overall quality of the marriage on a 10-point scale (1 = *Very Unhappy*, 10 = *Perfectly Happy*). Reports were summed so that scores could range from 6 to 45, with higher scores reflecting more marital satisfaction. Participants completed the QMI at every assessment and their reports across assessments were averaged to form an estimate of the overall level of marital satisfaction experienced by each spouse over the course of the first several years of marriage, which was controlled in all primary analyses. Internal consistency was adequate across all phases (coefficient alpha was at least .85 for both husbands and wives at each assessment).

Data Analysis

Analyses to estimate the association between sexual narcissism and infidelity needed to address a few complexities of the data. First, given that husbands and wives’ reports of infidelity violate the independence assumptions underlying OLS regression analyses, the association between sexual narcissism and reports of husbands and wives’ infidelity were estimated using an Actor-Partner Interdependence Model (Kenny, 1996), a multilevel model that accounted for the non-independence of husbands and wives’ reports. Second, given that infidelity was indicated using a dichotomous dummy-code (0 = no, yes = 1), we specified that the dependent variable of this model follow a Bernoulli sampling distribution (see Bryk & Raudenbush, 2002) using a logit link function. Finally, given that the analyses collapsed across two independent studies, we controlled for any idiosyncratic differences between these studies by including dummy code of study on the Level 2 intercept and examined whether all key effects varied significantly across the two studies by entering that dummy code on the relevant Level 2 slope in subsequent analyses. This latter procedure allowed us to document which effects replicated across the two studies and thus appear to be most robust.

Results

According to reports, a total of 13 (5.3 %) spouses engaged in an infidelity over the course of the study (54 % women). Bivariate correlations among infidelity and the independent variables are shown in Table 1. As can be seen, infidelity was positively associated with own sexual narcissism and negatively associated with own sexual and marital satisfaction among both

Table 1 Bivariate correlations among variables

	(1)	(2)	(3)	(4)	(5)
(1) Infidelity	.11	.21*	-.04	-.23*	-.17 [†]
(2) Own sexual narcissism	.21*	.57**	.29**	-.20*	.03
(3) Own narcissism	.06	.37**	.17[†]	.14	.11
(4) Own marital satisfaction	-.18*	-.18 [†]	-.10	.59**	.65**
(5) Own sexual satisfaction	-.19*	-.04	-.11	.61**	.70**

Husbands' correlations appear below the diagonal, wives' correlations appear above the diagonal, and correlations between husbands and wives appear on the diagonal in bold

[†] $p < .10$; * $p < .05$; ** $p < .01$

husbands and wives. The primary analyses examined the extent to which own and partner sexual narcissism uniquely predicted infidelity using the following multilevel model:

$$\begin{aligned} \text{Logit (Own Infidelity)} = & b_0 \\ & + b_1 (\text{Own Sexual Narcissism}_i) \\ & + b_2 (\text{Own Narcissism}_i) \\ & + b_3 (\text{Partner Sexual Narcissism}_i) \\ & + b_4 (\text{Partner Narcissism}_i) \\ & + b_5 (\text{Own Marital Satisfaction}_i) \\ & + b_6 (\text{Own Sexual Satisfaction}_i) \\ & + b_7 (\text{Participant Sex}_i) \\ & + b_8 (\text{Study}_c) + u_{0c} + r_{ic}, \end{aligned} \quad (1)$$

where i indexes individuals, c indexes couples, and random-effects control for the dependence between partners.

Results are shown in Table 2. As can be seen, sexual satisfaction remained negatively associated with infidelity, indicating that spouses who were less sexually satisfied were more likely to commit an infidelity. Controlling for that association, own sexual narcissism also remained positively associated with infidelity, indicating that spouses with higher levels of sexual narcissism were more likely to commit infidelity than were spouses with lower levels of sexual narcissism. This effect did not differ across husbands and wives, $B = -0.12$, $SE = .51$, $t(230) < 1$, or the two studies, $B = -0.62$, $SE = .80$, $t(230) < 1$. Notably, controlling for these two significant associations, own global narcissism, own marital satisfaction, partner global narcissism, and partner sexual narcissism were all unrelated to infidelity.

To examine which facets of own sexual narcissism drove the association between own sexual narcissism and infidelity, and to examine whether any individual facets of partner sexual narcissism were associated with infidelity, we estimated Equation 1 four more times, each time substituting a facet of own and partner sexual narcissism for the own and partner sexual narcissism total scores.

Table 2 Results of a multivariate, multilevel model predicting sexual infidelity

Measure	β	SE	OR
Own sexual narcissism	2.20**	0.63	9.02
Own narcissism	-1.99	1.77	0.14
Partner sexual narcissism	0.81	0.70	2.24
Partner narcissism	-2.61	1.87	0.07
Own marital satisfaction	-0.04	0.04	0.96
Own sexual satisfaction	-0.04**	0.01	0.96
Participant sex	0.27	0.26	1.30
Study	-0.47	0.52	0.62

For Study, $df = 118$; for all other variables, $df = 231$

** $p < .01$

The results of these analyses are shown in Table 3. As can be seen, all four subscales of own sexual narcissism were positively associated with infidelity. Own sexual exploitation was marginally positively associated with infidelity. Own sexual entitlement was also positively associated with infidelity; however, subsequent analyses that tested whether this association differed across the two studies indicated that the association was significantly stronger and only significant in Study 1, for the Own Sexual Entitlement \times Study interaction, $B = -2.16$, $SE = .56$, $t(229) = -3.82$, $p < .01$. Own lack of sexual empathy was positively associated with infidelity; however, subsequent analyses that tested whether this association differed across husbands and wives indicated that the association was marginally significantly stronger and only significant among men, for the Own Sexual Empathy \times Participant Sex interaction, $B = -1.46$, $SE = .77$, $t(230) = -1.90$, $p = .058$. Finally, own sexual skill was marginally positively associated with infidelity. Subsequent tests revealed that the effects of sexual exploitation, lack of sexual empathy, and sense of sexual skill did not differ across the two studies, and the effects of sexual exploitation, sexual entitlement, and sense of sexual skill did not differ across men and women.

Three of the four facets of partner sexual narcissism were also associated with own infidelity and sometimes in an opposite direction (indicating why the total score of partner sexual narcissism was not associated with infidelity). Partner sexual entitlement was positively associated with infidelity; however, subsequent analyses that tested whether this association differed across the two studies indicated that the association was significantly stronger and only significant in Study 2, for the Partner Sexual Entitlement \times Study interaction, $B = 1.09$, $SE = .45$, $t(229) = 2.40$, $p = .017$. Partner lack of sexual empathy was negatively associated with infidelity; however, subsequent analyses that tested whether this association differed across the two studies indicated that the association was significantly stronger and only significant in Study 2, for the Partner Lack of Sexual Empathy \times Study interaction, $B = -1.85$, $SE = .65$,

Table 3 Associations between SNS subscales and sexual infidelity

Measure	β	SE	OR
Sexual exploitation			
Own	0.85 [†]	0.47	2.35
Partner	-0.19	0.41	0.83
Sexual entitlement			
Own _{s1}	2.30***	0.52	9.96
Partner _{s2}	1.12***	0.28	3.06
Lack of sexual empathy			
Own _h	1.35**	0.50	3.86
Partner _{s2}	-1.28**	0.47	0.28
Sense of sexual skill			
Own	0.98 [†]	0.50	2.65
Partner	1.21*	0.55	3.34

$df = 231$. $s1$ = effect only significant in Study 1 and thus statistics are those for Study 1; $s2$ = effect only significant in Study 2 and thus statistics are those for Study 2; h = effect only significant for husbands and thus statistics are those for husbands

[†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

$t(230) = -2.86$, $p = .005$. Finally, partner sexual skill was positively associated with infidelity. Subsequent tests revealed that the effect of sense of sexual skill did not differ across the two studies and none of these effects differed across men and women.

We also repeated all analyses after dropping the covariates, including own and partner global narcissism. These analyses revealed the same general pattern of results, with two exceptions: (1) the Partner Sexual Entitlement \times Study interaction did not reach significance and (2) neither own nor partner sense of sexual skill was associated with infidelity. Follow-up analyses indicated that adding sexual satisfaction back into the model led to significant positive associations between own and partner sexual skill and infidelity, suggesting that sexual satisfaction “suppressed” the positive effects of sense of sexual skill on infidelity.

Discussion

Study Rationale and Summary of Results

The causes of marital discord and divorce are numerous and complex. Some of the strongest and most common predictors of such marital disruption appear to be poor problem-solving skills, displeasing personalities, family history of marital discord, infertility, and maltreatment (Amato & Rogers, 1997; Betzig, 1989; Karney & Bradbury, 1995; McGue & Lykken, 1992). But none of these is a stronger (Amato & Rogers, 1997) or more common (Betzig, 1989) predictor of marital disruption than is infidelity. Clearly, identifying the predictors of marital infidelity is an important research goal.

The current research used data drawn from 123 newlywed couples participating in two studies to examine the association between a domain-specific measure of sexual narcissism and infidelity. Controlling for own global narcissism, own sexual satisfaction, own marital satisfaction, partner sexual narcissism, and partner global narcissism, own sexual narcissism was positively associated with own infidelity. Further, each of the facets of sexual narcissism—sexual exploitation, sexual entitlement, low sexual empathy, and sexual skill—appeared to account for at least some of this association, though the consistency of these associations varied somewhat. Sexual exploitation was marginally positively associated with infidelity across both studies, indicating that spouses who tended to exploit their partners sexually were more likely to commit an infidelity over the course of both studies. Own sexual entitlement was positively associated with infidelity in one of the two studies, providing some evidence that spouses who tended to feel entitled to sex were more likely to commit infidelity. Lack of sexual empathy was positively associated with infidelity among husbands, but not among wives, across both studies, indicating that husbands who lacked empathy for their wives in sexual situations were more likely to commit an infidelity. Finally, own grandiose sense of sexual skill was marginally positively associated with infidelity across both studies, indicating the spouses who were more confident about their sexual skill were more likely to commit an infidelity. This latter finding joins other research suggesting that a sense of confidence and optimism is not always beneficial (see Baker & McNulty, 2013; Gibson & Sanbonmatsu, 2004; Isaacowitz & Seligman, 2002; McNulty & Karney, 2004; Norem, 2001; O’Mara, McNulty, & Karney, 2011; Shepperd & McNulty, 2002). Rather, the implications of a sense of skill likely depend on the context in which it is held and the outcome in question (McNulty, 2010; McNulty & Fincham, 2012; McNulty & Karney, 2004). Indeed, as described earlier, other research indicates that sexual skill is also positively associated with sexual and marital satisfaction (McNulty & Widman, 2013). Future research may benefit by examining other factors that determine for whom sexual skill leads to desirable versus undesirable outcomes.

Although partner sexual narcissism was not related with infidelity on average, three of the four facets of partner sexual narcissism were significantly associated with infidelity. Partner sexual entitlement was positively associated with infidelity in one of the studies, suggesting that spouses with partners who tended to believe they were entitled to sex were more likely to commit infidelity. Partner sense of sexual skill was positively associated with infidelity across both studies, indicating that spouses with partners who had a positive sense of sexual skill were more likely to commit an infidelity. And partner’s lack of sexual empathy was surprisingly negatively associated with infidelity in one of the two studies, indicating that spouses with partners who lacked sexual empathy were actually less likely to commit an infidelity. Given this finding was not predicted and differed significantly across the two

studies, it should be interpreted with caution until it can be replicated. All these associations emerged controlling for the corresponding facet of own sexual narcissism, indicating that they were not simply spurious due to spouses and partners being similar in their levels of sexual narcissism.

Notably, controlling for the effects of own and partner sexual narcissism, sexual satisfaction was negatively associated with infidelity, indicating that individuals who were less satisfied with their sexual relationship with their partner were more likely to commit an infidelity. The association between marital satisfaction and infidelity, in contrast, did not reach significance once the effects of sexual narcissism and sexual satisfaction were controlled, suggesting that global sentiments toward the marriage did not drive the infidelities that occurred in this sample. Taken together with the facts that it was sexual, but not global narcissism that was associated with infidelity, these findings highlight the importance of sexual motivations, rather than more general interpersonal motivations, to infidelity. Future research may benefit from shedding more light on this issue.

Theoretical and Practical Implications

These findings extend our understanding of infidelity in several important ways. Most notably, not only do they illuminate a trait, sexual narcissism, that is associated with infidelity, they also provide insight into the specific narcissistic processes that are responsible for this association. Own sexual entitlement, sexual exploitation, lack of sexual empathy, and sense of sexual skill were all associated with infidelity, indicating that narcissism is not associated with infidelity through one specific process; there are multiple processes involved in this complex relationship.

Second, these findings join others in demonstrating the value of measuring the extent to which the components of the personality system are active in the sexual domain to predicting and even understanding sexual behavior (Hurlbert et al., 1994; McNulty & Widman, 2013; Widman & McNulty, 2010; Zeigler-Hill, Enjaian, & Essa, 2013). Prior research on narcissism has demonstrated inconsistent links with infidelity, sometimes revealing significant associations (e.g., Atkins et al., 2005; Hunyady et al., 2008) and other times revealing non-significant associations (e.g., Jones and Weiser, 2014; Wiederman & Hurd, 1999; Wreford, 2012). The current research demonstrated that assessing the extent to which the cognitive components of narcissism were activated in the sexual domain can provide more precision in identifying links between narcissism and sexual functioning. Whereas globally assessed narcissism was unrelated to infidelity across both studies, spouses' reports of sexual narcissism and its facets were associated with infidelity, and the majority of the links did not vary across the two studies or across men and women. Future research may benefit from using domain-specific measures of

other personality traits as predictors of infidelity. For example, although studies of the Big Five personality traits have demonstrated several traits associated with infidelity, such as agreeableness and conscientiousness (e.g., Schmitt, 2004), domain-specific assessments of the extent to which each of the Big Five traits is activated in sexual domains may help establish stronger and more consistent links between these and other traits and infidelity.

Third, our findings provided some insights into the traits and psychological characteristics of the partners to whom spouses are more likely to be unfaithful. Not surprisingly, spouses appeared to be more likely to commit infidelity when their partners reported high levels of sexual entitlement. Yet, somewhat surprisingly, spouses were also more likely to commit infidelity when they were married to partners who were confident in their sexual abilities and less likely to commit infidelity when they were married to partners who lacked sexual empathy. It is unclear whether these particular qualities of partners caused infidelity or whether they are simply correlated with other factors that caused infidelity. For example, it is possible that people who marry partners who lack sexual empathy are less committed to their relationships in the first place, and that lack of commitment, not their partner's lack of sexual empathy, may predict their infidelity. Future research may benefit by trying to uncover the causal directions of some of these associations. Although it can be difficult or impossible to establish the causal role of personality, semantic priming studies may provide some important insights into these issues. Specifically, researchers could semantically prime people with various partner qualities, such as a lack of sexual empathy, and examine the extent to which such primes predict measures of their propensity toward infidelity, such as interests in alternative partners (for similar research, see DeWall et al., 2011; Gillath, Mikulincer, Birnbaum, & Shaver, 2008). Any significant associations would provide some evidence that partner personality plays a causal role in infidelity.

Finally, the current findings may have important practical implications. Infidelity is negatively associated with both interpersonal and intrapersonal well-being (Allen et al., 2005; Spanier & Margolis, 1983). Accordingly, interventions that successfully prevent infidelity can have important benefits. The current findings offer some important insights that may be used to increase the efficacy of such interventions. Most notably, the associations between sexual narcissism and infidelity can help identify those at risk for infidelity. Interventions may benefit from identifying and targeting individuals who have narcissistic tendencies that manifest in the sexual domain. The associations that emerged between the specific facets of sexual narcissism and infidelity provide insight into some ways to do this. For example, the association between sexual entitlement and infidelity suggests that lessening the extent to which individuals believe they are entitled to sex may lower their risk of committing infidelity. Likewise, the link between husbands' low

sexual empathy and infidelity suggests that increasing levels of sexual empathy may similarly decrease sexual infidelity among husbands. Of course, the stability of personality traits such as narcissism may make changing the underlying sources of these narcissistic tendencies difficult.

Strengths and Limitations

Several aspects of this research enhance our confidence in the findings reported here. First, very few of the significant associations varied across two independent studies of men and women, suggesting they were not due to sampling error and were rather broadly applicable to both men and women. Second, both studies were based on samples of married couples, people for whom sexual fidelity is particularly meaningful and consequential. Third, infidelity was assessed seven times over the course of each study, helping to minimize the problems due to retrospective reports that span longer periods of time. Finally, the measure of sexual infidelity was based on either partner's report, helping to minimize the extent of underreporting of these self-presentationally sensitive behaviors.

Despite these strengths, several factors nevertheless limit interpretation and generalizability of these results until they can be extended. First, although most effects replicated across two independent samples of couples, both samples were relatively small and the majority of couples in them were young and White. Although we are not aware of any reason to expect the association between sexual narcissism and infidelity to vary across people of different ages and races, future research may benefit from ensuring that these effects generalize to other populations. Further, given the small size of both samples and the low number of reported infidelities, null findings, including those involving partner sexual narcissism and own and partner global narcissism, should be interpreted with caution. Second, like all research on personality, these findings were correlational. And, although both studies were longitudinal, some of the data used to form the index of infidelity were obtained before reports of sexual narcissism were obtained. Although personality tends to be quite stable, there is some evidence that it can change over extended periods of time (Roberts, Walton, & Viechtbauer, Roberts et al. 2006). Future research may benefit by attempting to more rigorously demonstrate the causal effects of sexual narcissism and its facets. Third, infidelity was assessed with one item asked in different ways to spouses and partners, and agreement between spouses and partners was lower than ideal. Imperfect agreement between couple members' reports of one another's behaviors is not uncommon (e.g., Jacobson & Moore, 1981), however, and agreement may have been low in this particular case for several reasons: (1) in some cases, the partner may have been unaware of an infidelity; (2) in some cases, one member of the couple may have been more reluctant to report an infidelity than the other, even if both members of the couple knew about it; and/or (3) partners may have interpreted

their question regarding "faithfulness" differently than spouses interpreted their question regarding "infidelity." Finally, the effects of any factor on infidelity, including sexual narcissism, are likely moderated by other factors. That is, sexual narcissism may be more or less strongly associated with infidelity in the presence or absence of other contextual variables. Likewise, the extent to which infidelity predicts marital discord will likely depend on other factors, such as how frequently it occurs and both partners' interpretations of it. Research that develops a more contextualized picture of the predictors and consequences of infidelity will likely prove beneficial.

References

- Allen, E. S., Atkins, D. C., Baucom, D. H., Snyder, D. K., Gordon, K. C., & Glass, S. P. (2005). Intrapersonal, interpersonal, and contextual factors in engaging in and responding to extramarital involvement. *Clinical Psychology: Science and Practice, 12*, 101–130.
- Amato, P. R., & Rogers, S. J. (1997). A longitudinal study of marital problems and subsequent divorce. *Journal of Marriage and the Family, 59*, 612–624.
- Atkins, D. C., Baucom, D. H., & Jacobson, N. S. (2001). Understanding infidelity: Correlates in a national random sample. *Journal of Family Psychology, 15*, 735–749.
- Atkins, D. C., Yi, J., Baucom, D. H., & Christensen, A. (2005). Infidelity in couples seeking marital therapy. *Journal of Family Psychology, 19*, 470–473.
- Baker, L. R., & McNulty, J. K. (2013). When low self-esteem encourages behaviors that risk rejection to increase interdependence: The role of relational self-construal. *Journal of Personality and Social Psychology, 104*, 995–1018.
- Bem, D. J., & Allen, A. (1974). On predicting some of the people some of the time: The search for cross-situational consistencies in behavior. *Psychological Review, 81*, 506–520.
- Betzig, L. (1989). Causes of conjugal dissolution: A cross-cultural study. *Current Anthropology, 30*, 654–676.
- Bryk, A. S., & Raudenbush, S. W. (2002). *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: Sage.
- Buss, D. M., & Shackelford, T. K. (1997). Susceptibility to infidelity in the first year of marriage. *Journal of Research in Personality, 31*, 193–221.
- Campbell, W. K., Bosson, J. K., Goheen, T. W., Lakey, C. E., & Kernis, M. H. (2007). Do narcissists dislike themselves "deep down inside?" *Psychological Science, 18*, 227–229.
- Campbell, K. W., & Foster, C. A. (2002). Narcissism and commitment in romantic relationships: An investment model analysis. *Personality and Social Psychology Bulletin, 28*, 484–495.
- Campbell, K. W., Foster, C. A., & Finkel, E. J. (2002). Does self-love lead to love for others? A story of narcissistic game playing. *Journal of Personality and Social Psychology, 83*, 340–354.
- Cano, A., & O'Leary, K. D. (2000). Infidelity and separations precipitate major depressive episodes and symptoms of nonspecific depression and anxiety. *Journal of Consulting and Clinical Psychology, 68*, 774–781.
- Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology, 56*, 453–484.
- DeWall, C. N., Lambert, N. M., Slotter, E. B., Pond, R. S., Deckman, T., Finkel, E. J., et al. (2011). So far away from one's partner, yet so close to romantic alternatives: Avoidant attachment, interest in alternatives,

- and infidelity. *Journal of Personality and Social Psychology*, *101*, 1302–1316.
- Drigotas, S. M., Safstrom, C. A., & Gentilia, T. (1999). An investment model prediction of dating infidelity. *Journal of Personality and Social Psychology*, *77*, 509–524.
- Epstein, S. (1979). The stability of behavior: On predicting most of the people much of the time. *Journal of Personality and Social Psychology*, *37*, 1097–1126.
- Fincham, F. D., & Bradbury, T. N. (1987). The assessment of marital quality: A reevaluation. *Journal of Marriage and the Family*, *49*, 797–809.
- Foster, J. D., Shrira, I., & Campbell, W. K. (2006). Theoretical models of narcissism, sexuality, and relationship commitment. *Journal of Social and Personal Relationships*, *23*, 367–386.
- Gibson, B., & Sanbonmatsu, D. M. (2004). Optimism, pessimism and gambling: The downside of optimism. *Personality and Social Psychology Bulletin*, *30*, 149–160.
- Gillath, O., Mikulincer, M., Birnbaum, G. E., & Shaver, P. R. (2008). When sex primes love: Subliminal sexual priming motivates relationship goal pursuit. *Personality and Social Psychology Bulletin*, *34*, 1057–1069.
- Greeley, A. (1994). Marital infidelity. *Society*, *31*, 9–13.
- Hall, J. H., & Fincham, F. D. (2009). Psychological distress: Precursor or consequence of dating infidelity? *Personality and Social Psychology Bulletin*, *35*, 143–159.
- Hudson, W. W. (1998). Index of sexual satisfaction. In C. M. Davis, W. L. Yarber, R. Bauserman, G. Schreer, & S. L. Davis (Eds.), *Handbook of sexuality-related measures* (pp. 512–513). Thousand Oaks, CA: Sage.
- Hunyady, O., Josephs, L., & Jost, J. T. (2008). Priming the primal scene: Betrayal trauma, narcissism, and attitudes toward sexual infidelity. *Self and Identity*, *7*, 278–294.
- Hurlbert, D. F., Apt, C., Gasar, S., Wilson, N. E., & Murphy, Y. (1994). Sexual narcissism: A validation study. *Journal of Sex and Marital Therapy*, *20*, 24–34.
- Isaacowitz, D. M., & Seligman, M. E. P. (2002). Cognitive style predictors of affect change in older adults. *International Journal of Aging and Human Development*, *54*, 233–253.
- Jacobson, N. S., & Moore, D. (1981). Spouses as observers of the events in their relationships. *Journal of Consulting and Clinical Psychology*, *49*, 269–277.
- Jonason, P. K., Li, N. P., Webster, G. D., & Schmitt, D. P. (2009). The dark triad: Facilitating a short-term mating strategy in men. *European Journal of Personality*, *23*, 5–18.
- Jones, D. N., & Weiser, D. A. (2014). Differential infidelity patterns among the Dark Triad. *Personality and Individual Differences*, *57*, 20–24.
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin*, *118*, 3–34.
- Kenny, D. A. (1996). Models of non-independence in dyadic research. *Journal of Social and Personal Relationships*, *13*, 279–294.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago: University of Chicago Press.
- Mattingly, B. A., Clark, E. M., Weidler, D. J., Bullock, M., Hackathorn, J., & Blankmeyer, K. (2011). Sociosexual orientation, commitment, and infidelity: A mediation analysis. *Journal of Social Psychology*, *151*, 222–226.
- McGue, M., & Lykken, D. T. (1992). Genetic influence on risk of divorce. *Psychological Science*, *3*, 368–373.
- McNulty, J. K. (2010). When positive processes hurt relationships. *Current Directions in Psychological Science*, *19*, 167–171.
- McNulty, J. K., & Fincham, F. D. (2012). Beyond positive psychology? Toward a contextual view of psychological processes and well-being. *American Psychologist*, *67*, 101–110.
- McNulty, J. K., & Fisher, T. D. (2008). Gender differences in response to sexual expectancies and changes in sexual frequency: A short-term longitudinal investigation of sexual satisfaction in newly married heterosexual couples. *Archives of Sexual Behavior*, *37*, 229–240.
- McNulty, J. K., & Karney, B. R. (2004). Positive expectations in the early years of marriage: Should couples expect the best or brace for the worst? *Journal of Personality and Social Psychology*, *86*, 729–743.
- McNulty, J. K., & Russell, V. M. (2010). When “negative” behaviors are positive: A contextual analysis of the long-term effects of problem-solving behaviors on changes in relationship satisfaction. *Journal of Personality and Social Psychology*, *98*, 587–604.
- McNulty, J. K., & Widman, L. (2013). The implications of sexual narcissism for sexual and marital satisfaction. *Archives of Sexual Behavior*, *42*, 1021–1032.
- Mischel, W., & Peake, P. K. (1982). Beyond deja vu in the search for cross-situational consistency. *Psychological Review*, *89*, 730–755.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, *102*, 246–268.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, *12*, 177–196.
- Norem, J. K. (2001). *The positive power of negative thinking*. New York: Basic Books.
- Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family*, *45*, 141–151.
- O’Mara, E. M., McNulty, J. K., & Karney, B. R. (2011). Positively biased appraisals in everyday life: When do they benefit mental health and when do they harm it? *Journal of Personality and Social Psychology*, *101*, 415–432.
- Raskin, R., Novacek, J., & Hogan, R. (1991). Narcissistic self-esteem management. *Journal of Personality and Social Psychology*, *60*, 911–918.
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, *54*, 890–902.
- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, *132*, 1–25.
- Russell, V. M., Baker, L. R., & McNulty, J. K. (2013). Attachment insecurity and infidelity in marriage. *Journal of Family Psychology*, *27*, 242–251.
- Sánchez Sosa, J. J., Hernández Guzmán, L., & Romero, M. L. (1997). Psychosocial predictors of marital breakup: An exploratory study in Mexican couples and former couples. *Archivos Hispanoamericanos de Sexología*, *3*, 125–136.
- Sarason, I. G., Johnson, J. H., & Siegel, J. M. (1978). Assessing the impact of life changes: Development of the Life Experiences Survey. *Journal of Consulting and Clinical Psychology*, *46*, 932–946.
- Schmitt, D. P. (2004). The Big Five related to risky sexual behaviour across 10 world regions: Differential personality associations of sexual promiscuity and relationship infidelity. *European Journal of Personality*, *18*, 301–319.
- Shackelford, T. K. (2001). Self-esteem in marriage: An evolutionary psychological analysis. *Personality and Individual Differences*, *30*, 371–390.
- Shepperd, J. A., & McNulty, J. K. (2002). The affective consequences of expected and unexpected outcomes. *Psychological Science*, *13*, 85–88.
- Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology*, *60*, 870–883.

- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15–28.
- Spanier, G. B., & Margolis, R. L. (1983). Marital separation and extramarital sexual behavior. *Journal of Sex Research*, 19, 23–48.
- Watson, P. J., Grisham, S. O., Trotter, M. V., & Biderman, M. D. (1984). Narcissism and empathy: Validity evidence for the narcissistic personality inventory. *Journal of Personality Assessment*, 45, 159–162.
- Widman, L., & McNulty, J. K. (2010). Sexual narcissism and the perpetration of sexual aggression. *Archives of Sexual Behavior*, 39, 926–939.
- Widman, L., & McNulty, J. K. (2011). Narcissism and sexuality. In W. K. Campbell & J. Miller (Eds.), *The handbook of narcissism and narcissistic personality disorder: Theoretical approaches, empirical findings, and treatment* (pp. 351–359). Hoboken, NJ: Wiley.
- Wiederman, M. W. (1997). Extramarital sex: Prevalence and correlates in a national survey. *Journal of Sex Research*, 34, 167–174.
- Wiederman, M. W., & Hurd, C. (1999). Extradyadic involvement during dating. *Journal of Social and Personal Relationships*, 16, 265–274.
- Wreford, J. (2012). *How close is too close? "It's complicated": Factors associated with cheating, electronic extradyadic intimacy, & attraction to close cross-sex friends*. Unpublished Master's thesis, University of Guelph, Guelph, ON, Canada.
- Wryobeck, J. M., & Wiederman, M. W. (1999). Sexual narcissism: Measurement and correlates among college men. *Journal of Sex and Marital Therapy*, 25, 321–331.
- Zeigler-Hill, V., Enjaian, B., & Essa, L. (2013). The role of narcissistic personality features in sexual aggression. *Journal of Social and Clinical Psychology*, 32, 186–199.