



Theoretical models of narcissism, sexuality, and relationship commitment

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ABSTRACT

The present research examines the link between narcissistic personality and sexuality. Additionally, it explores how sexuality may inform the operation of narcissism within the context of close relationships. Two theoretical models, each addressing one of these issues, were evaluated empirically. Our first proposed model suggests that the agentic nature of narcissism explains why narcissism is linked to less restricted forms of sexual attitudes and behaviors (i.e., unrestricted sociosexuality). Our second proposed model suggests that a consequence of the sexual attitudes and behaviors associated with narcissism is low relationship commitment. Both of these models received empirical support. Discussion centers upon the theoretical implications and limitations of these models.

KEY WORDS: agency • commitment • narcissism • sexuality • sociosexuality

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Narcissism and sexuality have been linked to one another since at least the writings of Freud (1914) and Ellis (1898). Outside the psychodynamic literature, however, little empirical research has addressed why narcissism and sexuality are associated, and what the consequences of this association might be. We suggest that to understand the relationship between narcissism and sexuality one must consider the interpersonal orientation of narcissism, which is decidedly agentic. Narcissistic individuals care a great deal about agentic qualities such as power, dominance and extraversion; however, they do not show the same regard for communal qualities like emotional intimacy and warmth (Bradlee & Emmons, 1992; Campbell, Brunell, & Finkel, 2006). We propose that this orientation is reflected in the sexual attitudes and behaviors of those with narcissistic personalities. Furthermore, we suggest that the narcissistic approach to sexuality has implications for the functioning of their relationships.

Narcissism and close relationships

The term ‘narcissism’ has been applied traditionally to a specific personality disorder: Narcissistic Personality Disorder or NPD (American Psychiatric Association, 1994). During the last 25 years, however, researchers in the area of personality and social psychology have studied a personality dimension labeled ‘normal’ narcissism. A person with normal narcissism may possess some of the characteristics of NPD; however, the majority of individuals with high levels of normal narcissism do not meet the diagnostic criteria for NPD. Elevated normal narcissism is typically defined as scoring above the mean on the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). In the present article when we refer to narcissism, we are referring to normal narcissism – or narcissism as it is measured with the NPI or other similar instrument.

There is a large and growing body of literature on the topic of normal narcissism (see Campbell & Foster, in press, for review). As might be expected, narcissism is associated with positive attitudes toward the self (e.g., high self-esteem; Brown & Zeigler-Hill, 2004). Consistent with their agentic orientation, however, narcissistic individuals adopt more strongly positive attitudes toward the self with regard to agentic traits (e.g., intelligence, attractiveness). They are less positive (and they care less) about communal traits (e.g., intimacy, caring) (Campbell, Rudich, & Sedikides, 2002). Campbell et al. (2006) suggest that the agentic orientation of narcissism is linked to poor relationship functioning, such as low commitment (Campbell & Foster, 2002), high levels of infidelity (Campbell, Foster, & Finkel, 2002), and low emotional intimacy (Foster, Shrira, Campbell, & Loggins, 2003).

Because narcissism is associated with poor relationship functioning in a variety of ways, it is important to uncover the roots of these associations. That is, why are narcissistic romantic partners less committed, less faithful, and less emotionally intimate? One important domain of relationships that

may influence all of these problems, but which has received very little attention from narcissism researchers, is that of sexuality. Sexuality is a key component of many romantic relationships. If narcissism influences sexuality, the link may have a variety of important implications for relationships involving narcissistic romantic partners. Thus, it is critical to understand (a) how narcissism and sexuality are linked, and (b) whether this link is informative to the functioning of relationships (e.g., commitment levels) that involve narcissistic partners. To this end, we present two models of narcissism, sexuality, and relationship functioning. The first model (Study 1) investigates the nature of the relationship between narcissism and sexuality. The second model (Study 2) uses sexuality as a tool for understanding the link between narcissism and poor relationship functioning.

Study 1

The purpose of the first study is to test a theoretical model that explains why narcissism and sexuality are related. We begin by reviewing the literature on personality and sexuality, and more specifically, studies that are informative of the operation of narcissism within the domain of sexuality. We then turn our attention to an existing theoretical model of narcissism and relationships that provides the base for our proposed model of narcissism and sexuality. Before we discuss the relationship between narcissism and sexuality, however, we first define sexuality as it is used in the present article.

Narcissism and sexuality

Sexual intercourse occurs within a variety of interpersonal contexts. Sometimes it occurs within the context of close personal relationships (e.g., marriage); sometimes it occurs within relationships that are relatively impersonal (e.g., 'one-night stands'). Importantly, there are individual differences in terms of which interpersonal contexts people prefer to have sex. Relationships researchers refer to this individual difference variable as *sociosexuality* (Simpson & Gangestad, 1991). Individuals labeled 'restricted' require love and attachment in their relationships prior to engaging in sexual intercourse, whereas those labeled 'unrestricted' require less commitment from their partners prior to engaging in sexual intercourse.

Personality theorists have begun to incorporate sociosexuality into their research (e.g., Gangestad & Snyder, 2000; McHoskey, 2001). From this work, there is some indirect evidence that narcissism is associated with less restricted sociosexuality. One such line of evidence stems from research on self-monitoring (for review of the self-monitoring literature see Gangestad & Snyder, 2000). In a now classic demonstration of the interplay between personality and sex, Snyder, Simpson, and Gangestad (1986) found that high self-monitors report less restricted sociosexuality than do low self-monitors. The authors explained their results in terms of the ease with

which high self-monitors form relatively impersonal relationships with others, and their reluctance to form highly attached relationships. Importantly, narcissism and self-monitoring are positively correlated with one another (e.g., Emmons, 1984), which indirectly suggests a potential link between narcissism and unrestricted sociosexuality.

In addition to self-monitoring, McHoskey (2001) found that Machiavellian personality (i.e., a personality type associated with being interpersonally manipulative) tends to be associated with less restricted sociosexuality. For example, Machiavellian personality is positively associated with sexual promiscuity and infidelity. Additionally, McHoskey (1995) demonstrated a link between Machiavellian and narcissistic personalities, which suggests a potential link between narcissism and unrestricted sociosexuality. Furthermore, several of the 'Big Five' personality factors (see Costa & Widiger, 1994) have also been found to correlate with less restricted sociosexuality, including low agreeableness and high extraversion (Wright & Reise, 1997). Narcissism also correlates with low agreeableness and high extraversion (Bradlee & Emmons, 1992), suggesting once more a potential link between narcissism and unrestricted sociosexuality.

Other research has focused more directly on the relationship between narcissism and sociosexuality. Reise and Wright (1996), for example, demonstrated that certain personality disorders such as narcissism and psychopathy are related to less restricted sociosexuality. They suggest that unrestricted sociosexuality flourishes in people with traits such as egocentrism and lack of empathy – traits that are both associated with narcissism (e.g., Watson, Grisham, Trotter, & Biderman, 1984).

In sum, there is both indirect and direct evidence that narcissism is linked to unrestricted sociosexuality. The nature of this relation, however, has not been examined empirically. We propose that the general nature of narcissism, which is highly agentic, but lacking in communion, plays a role in the relation between narcissism and sociosexuality. This argument relies upon Campbell et al.'s (2006) Agency Model of narcissism, to which we now turn our attention.

The Agency Model of narcissism

Bakan (1966) introduced the terms *agency* and *communion* to describe the existence of individuals as solitary units (agency) or as members of groups (communion). The motivations of individuals with agentic orientations focus more on enhancing the functioning of the self (e.g., increasing feelings of self-worth), whereas the motivations of those with communal orientations focus more on enhancing the functioning of the group (e.g., increasing intimacy; Wiggins, 1991). A large and varied literature exists on how agency and communion influence our attitudes and behavior (see Helgeson, 1994 for a review).

Campbell and colleagues (Campbell et al., 2006) recently proposed the Agency Model of narcissism to describe how narcissism operates within the context of interpersonal relationships. According to this model, individuals with narcissistic personalities are agentially oriented, and this orientation

extends to their romantic relationships (e.g., they have a strong interest in dominance, power, and excitement; Bradlee & Emmons, 1992); they are less interested in communal qualities, such as warmth, caring, or nurturing. For example, narcissistic people care primarily about their own wants and needs (Buss & Chiodo, 1991), are high in sensation seeking (Raskin & Terry, 1988), and are relatively uninterested in intimacy or caring (Campbell, 1999). When involved in relationships, people with high levels of narcissism tend to be attentive to alternative dating partners (Campbell & Foster, 2002) and characterized as game players (Campbell, Foster, & Finkel, 2002). Indeed, persons high in narcissism tend to view relationships as arenas for bolstering themselves, sometimes even at the expense of their partners (Campbell, Rudich, & Sedikides, 2002).

Of particular relevance to our proposed model of narcissism and sexuality, the Agency Model stresses that because narcissism is associated with agentic conceptualizations of relationships, narcissistic individuals tend to pursue agentic rather than communal goals within their relationships. For example, narcissistic individuals tend to prefer romantic partners who make them feel powerful or raise their social status (i.e., provide agentic rewards) rather than partners who provide emotional intimacy or warmth (i.e., communal rewards; Campbell, 1999). One would expect this agentic orientation to influence many if not all aspects of romantic relationships, including sexuality. Therefore, our proposed model first predicts that narcissism will be associated with agentic conceptualizations of sexuality. Our model further predicts that the agentic sexual concepts of narcissistic individuals will be reflected by the types of sexual outcomes or rewards they prefer (i.e., agentic versus communal).

Narcissism and sexual outcomes

Human sexuality results in any number of outcomes; two of the most important (and most salient) are emotional intimacy and physical pleasure. Intimacy or relatedness and physical pleasure are identified as fundamental human needs (e.g., Baumeister & Leary, 1995; Deci & Ryan, 1985; Epstein, 1990; Sheldon, Elliot, & Kim, 2001), and it may be argued that humans, as a species, thrive because sexual intercourse feels good and promotes closeness. The physical pleasure reinforces the behavior, and the closeness that sex promotes maintains the bonds that are (or at least were) necessary for the survival of offspring (Morris, 1999). With this said, however, physical pleasure and emotional intimacy are rewards that appeal to different types of needs. Physical pleasure appeals more to agentic concerns, whereas emotional intimacy appeals more to communal concerns. Therefore, agentically oriented individuals, who are more concerned with satisfying their personal desires, should desire physical pleasure more and emotional intimacy less as an outcome of sexual intercourse. Our proposed model thus predicts that people with agentic orientations will downplay the importance of emotional intimacy, instead focusing more on physical pleasure.

In summary, the Agency Model of narcissism suggests that narcissism is associated with an agentic view of the world, including their relationships in

general and the sexual component of their relationships in particular. Therefore, narcissistic individuals place greater importance upon agentic rather than communal sexual outcomes (i.e., physical pleasure versus emotional intimacy). We now turn to how these components of our proposed model may illuminate the relationship between narcissism and sociosexuality.

Explaining the relationship between narcissism and unrestricted sociosexuality

Our proposed model follows the path from the general conceptualization of sex (i.e., agentic versus communal) to the motivations associated with this underlying conceptualization (i.e., attainment of physical pleasure versus emotional intimacy), and concludes with the specific sexual attitudes and behaviors that are consistent with these motivations (i.e., unrestricted versus restricted sociosexuality). Importantly, the attainment of emotional intimacy from sexual intercourse generally requires some existing closeness on the part of romantic partners. Physical pleasure, however, generally does not. Emotional intimacy is more complicated and is more likely to be realized in fewer, more exclusive relationships. Emphasis on physical pleasure as an outcome of sexual intercourse should therefore be associated with less restricted sexual attitudes and behavior, as such emphasis allows the pursuit of physical pleasure while simultaneously decreasing emotional intimacy. Consequently, we argue that narcissism is associated with unrestricted sociosexuality in part because of the links between (a) narcissism and agentic sexual conceptualizations, and (b) agentic conceptualizations and greater emphasis placed upon physical pleasure rather than emotional intimacy as an outcome of sexual intercourse.

We are aware, however, that sexual outcomes may not provide the *only* route by which agentic sexual concepts influence sociosexual orientation. There are likely other unknown factors that explain the link between agentic sexual conceptualization and sociosexuality. Indeed, the agentic sexual concepts of narcissistic individuals may be tied directly to unrestricted sociosexuality. In other words, sexual outcomes may partially mediate the link between agentic sexual concept and unrestricted sociosexuality. We also suggest that a second, as of yet undetermined route exists between agentic sexual conceptualization and sociosexuality. This route contains unknown mediators and/or a possible direct connection between agentic sexual conceptualization and sociosexuality.

Model overview

We have argued that narcissism is linked to an agentic conceptualization of sex, which explains unrestricted sociosexuality in a variety of ways. One means through which this may become manifest is via the sexual outcomes (i.e., physical pleasure) that people with higher levels of narcissism (and more agentic sexual concepts) are likely to value. Our proposed model of narcissism, agency, and sociosexuality suggests the following paths between narcissism and sociosexuality: (a) a direct path leading from narcissism to agentic sexual conceptualization; (b) a direct path leading from agentic

conceptualization to unrestricted sociosexuality representing a possible direct connection and/or unknown factors that mediate the association between the two; and (c) an indirect path leading from agentic conceptualization to unrestricted sociosexuality via the value placed upon physical pleasure as a sexual outcome.

Method

Participants

A total of 187 women and 85 men (M age = 19.4; 90% Caucasian) were recruited from the undergraduate research participant pool. Eighty-four percent of the participants reported involvement in a romantic relationship at the time of the investigation, with the average length of the current relationships being 1.41 years ($SD = 1.40$). Nearly all of the romantically involved participants (93%) reported being involved in dating relationships, and 88% characterized their relationships as exclusive in nature. We did not assess explicitly whether participants were involved in sexual relationships at the time of the study, nor did we limit our sample to participants who were involved in sexual relationships at the time of the study. Given that sociosexuality measures the willingness and/or desire to engage in uncommitted sexual behavior, it is unlikely that either of these factors would have altered the results significantly.

Materials and procedure

Narcissism. Narcissism was assessed with the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), which consists of 40 forced-choice items, each containing two alternative descriptions of participants. Examples of the descriptions include 'I will be a success' and 'I find it easy to manipulate people.' Participants receive 1 point each time they select a narcissistic alternative. Total scores on the NPI can range from 0 to 40 with higher scores indicating greater narcissism ($M = 17.0$, $SD = 7.1$, $\alpha = .85$).

Concept of Sex Scale (COS). In order to assess how participants conceptualize sexuality, the authors as well as a group of undergraduate research assistants generated a list of words that could be used as agentic or communal descriptors of sex (e.g., 'closeness,' 'power'). The authors then paired the list down to 14 items (7 agentic items; 7 communal items) that were thought to best characterize agentic versus communal sexual conceptualizations. Participants rated each item on a 9-point Likert-type scale with '1' meaning 'not at all important' and '9' meaning 'extremely important' to their concept of sex.

We then investigated the factor structure of the COS scale. Specifically, we were interested in whether the agentic items would converge to form one factor and whether the communal items would converge to form a separate factor. The 14 COS items were factor analyzed, using the maximum likelihood extraction procedure and direct oblimin rotation. After examining a scree plot, it was determined that two dominant and interpretable factors had emerged. The first factor we labeled *communal sexuality* and is composed of COS items: Loyalty, love, trust, closeness, honesty, respect, and happiness. The second factor we labeled *agentic sexuality* and is composed of COS items: power, domination,

ego, influence, leading, manipulation, and daring. All items loaded positively on their respective factors at greater than .50 (average loading of .66), and none cross-loaded at greater than .30 (average cross-loading of -.11).

Both communal and agentic sexuality items displayed acceptable internal consistency (Cronbach's $\alpha = .87$ and $.80$ respectively). Factor scores for both agentic and communal sexuality were calculated for each participant using Thurstone's (1935) regression method and are used in all subsequent analyses. Sample descriptive statistics for each scale were as follows: communal concept ($M = 0$, $SD = .95$, $\alpha = .87$; scores ranged from -4.15 to $.79$); agentic concept ($M = 0$, $SD = .92$, $\alpha = .80$; scores ranged from -1.40 to 2.29). Mean scores are 0, because Thurstone's method produces standardized factor scores with means of 0; scores represent the participants' relative standing on each component of the individual factor with 0 being the sample average.

Sociosexuality. Participants' degree of sociosexuality was assessed with seven items from the Sociosexuality Orientation Inventory (SOI; Simpson & Gangestad, 1991). The scale assesses sociosexuality with four self-report *behavioral items* and three *attitudinal items* in participants' current or most recent romantic relationships. Attitudinal items were all measured on 9-point Likert-type scales from 'strongly disagree' to 'strongly agree.' The behavioral item that assessed sexual fantasy was assessed on an 8-point Likert-type scale from 'never' to 'at least once per day.' Participants were allowed to freely respond numerically to the remaining items. Higher scores indicated less restricted sociosexuality. Following the same decision procedure used to create COS scores, sociosexuality factor scores for each participant were computed using Thurstone's (1935) regression method and are used in all subsequent analyses ($M = 0$; $SD = .59$, $\alpha = .86$; scores ranged from $-.96$ to 3.09).

Emotional Intimacy versus Physical Pleasure Scale (EIPP). Participants then completed the EIPP, a measure developed by the authors to assess the extent to which participants judged physical pleasure versus emotional intimacy to be more important outcomes of sexual intercourse. Specifically, this single-item measure asks participants to 'circle the number that reflects the degree to which emotional intimacy and/or physical pleasure are important components of sexual intercourse' using a 13-point Likert-type scale, ranging from 'emotional intimacy most important,' to 'physical pleasure most important.' A middle option reflected that emotional intimacy and physical pleasure were equally important to participants. This option is important because its inclusion meant that participants did not have to choose one outcome over the other (38% of all participants chose this middle option). Participants reported average EIPP scores of 5.8 ($SD = 2.4$).

Results and discussion

Our proposed model of narcissism and sociosexuality was tested using LISREL (Joreskog & Sorbom, 1993). In our proposed model, we argued that narcissism would be associated with more agentic sexual conceptualizations. We further proposed that importance of physical pleasure as an outcome of sexual intercourse would partially mediate the relationship between sexual conceptualization and sociosexuality. Finally, we proposed that agentic sexual

conceptualization would also be associated with less restricted sociosexuality via unidentified mechanisms or directly. This pattern is shown in Figure 1. The χ^2 statistic though statistically significant was quite small, $\chi^2(2, N = 272) = 6.76$, $p = .03$, suggesting some initial support for the model. Because the χ^2 statistic is related directly to sample size (and because the sample size in this study was relatively large) we next assessed model fit with fit indices less affected by sample size, such as the NFI (Bentler & Bonnet, 1980), the CFI (Bentler, 1990), the RMSEA (Steiger, 1990), and the SRMR (Joreskog & Sorbom, 1996). The results of these fit indices suggested good model fit. The NFI (.96) and CFI (.97) were both above the recommended level of .95, whereas the RMSEA (.09) and SRMR (.05) were below or near the recommended level of .08. This suggests that the model fits the data.

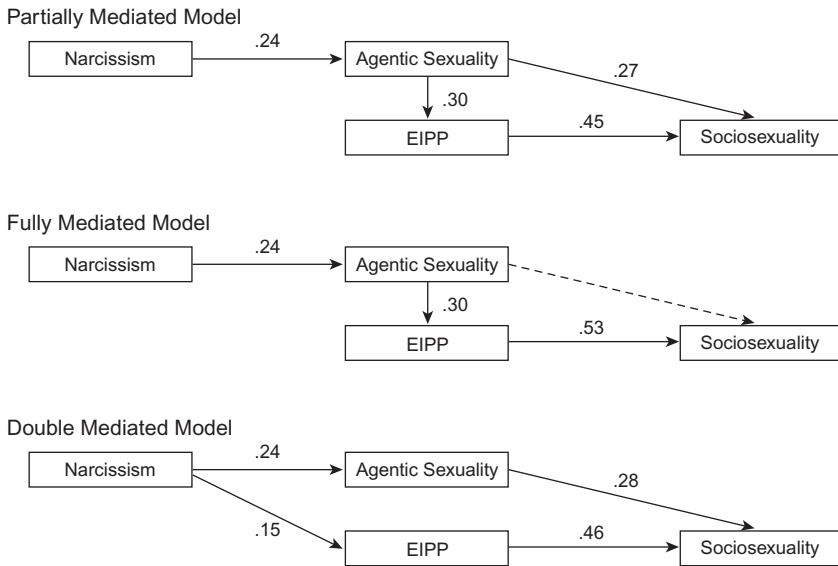
Our proposed model of narcissism and sociosexuality received strong empirical support. An examination of the path coefficients suggests that participants with higher levels of narcissism tended to report more agentic sexual conceptualizations than did those with lower narcissism scores. Furthermore, agentic conceptualizations of sex were associated with less restricted sociosexuality both directly (possibly via undetermined mediators) and via greater importance being placed on physical pleasure as an outcome of sexual intercourse.

In order to provide additional confidence in our model we tested two alternative models. In our first alternative model, the importance of physical pleasure as an outcome of sex fully mediates the link between agentic sexuality and sociosexuality (i.e., we constrained to 0 the path from agentic sexuality to sociosexuality). This model suggests that sexual outcomes provide full explanation (i.e., mediation) of the link between agentic sexuality and sociosexuality. If our originally proposed partially mediated model is correct, then the competing model should provide significantly worse fit than our proposed model. If we are wrong, however, the competing model should provide equivalent or better fit.

The competing model did not fit the data well [$\chi^2(df = 3, N = 272) = 32.69$, $p < .001$, NFI = .80, CFI = .81, RMSEA = .18, SRMR = .10], and fit the data less well than did the Partially Mediated model, thus supporting the retention of our proposed model, $\Delta\chi^2(df = 1; N = 272) = 25.93$, $p < .001$. Thus, our proposed model fits the data significantly better than does a competing model in which importance being placed on physical pleasure as an outcome of sex fully mediates the relationship between agentic sexuality and unrestricted sociosexuality. This analysis suggests that in addition to greater importance placed upon physical pleasure as a sexual outcome, agentic sexuality is associated with unrestricted sociosexuality via undetermined mechanisms, possibly even directly.

A final contrast pitted our hypothesized partially mediated model against a double mediated model, where both agentic sexuality and the importance of physical pleasure as an outcome of sex each directly mediate the link between narcissism and sociosexuality. This model suggests that the importance of physical pleasure as an outcome of sex does not stem from agentic sexuality, but instead stems directly from narcissism, as does agentic sexuality. The fit indices suggest that this competing model does not fit the data very well. Each fit index failed to surpass recommended levels suggesting good model fit [$\chi^2(df = 2, N = 272) = 26.07$, $p < .001$, NFI = .84, CFI = .85, RMSEA = .21, SRMR = .10]. In short, this alternative double mediation model did not provide adequate fit to the data, nor did it match our proposed model in terms of model fit. Therefore, we reject this alternative model and retain our proposed model of narcissism and sociosexuality.

FIGURE 1
Competing models of narcissism and sociosexuality.



Note. Numbers represent standardized path coefficients. All estimated path coefficients are significant (i.e., $p < .05$). Dashed lines indicate that path coefficients have been constrained to 0. Solid lines indicate that path coefficients have been freely estimated.

Summary

Our proposed model of narcissism and sociosexuality provides an acceptable fit to the data. Additionally, our model provides better fit to the data compared to two reasonable alternative models of narcissism and sociosexuality. According to our model, the link between narcissism and unrestricted sociosexuality is partially explained by the agentic sexual natures of narcissistic individuals. That is, narcissistic individuals tend to view sex in terms of individualistic pursuits, which manifests itself as unrestricted sociosexuality. This agentic conceptualization is tied to unrestricted sociosexuality by the importance that narcissistic lovers place on sexual outcomes that are tied more strongly to the self rather than the couple. Additionally, although sexual outcomes play a role in explaining the link between agentic sexual concepts and unrestricted sociosexuality, there are other factors that have not yet been identified, including the possibility that agentic sexual concepts are linked directly to unrestricted sociosexuality.

Thus far, we have examined potential reasons why narcissism and sociosexuality are linked. It is also important, however, to examine potential consequences of this relationship. That is, can we use the link between narcissism and unrestricted sociosexuality to explain the attitudes and cognitions of narcissistic individuals? Because sexuality frequently occurs

within the context of romantic relationships, we attempted to use sociosexuality to explain an empirical finding relevant to how narcissistic individuals function within their relationships. It has been demonstrated that romantic partners with elevated levels of narcissism tend to be less committed to their relationships (Campbell & Foster, 2002); that is, they tend to be less desirous of maintaining their romantic relationships, instead preferring shorter-termed romantic pairings. Our next study investigates whether unrestricted sociosexuality can be used as a tool for understanding why narcissistic romantic partners tend to be less committed.

Study 2

Relationship functioning

The purpose of the second study was to determine whether sociosexuality illuminates the relationship between narcissism and relationship functioning. Relationship functioning involves how well the relationship operates. Frequently, when relationships researchers speak of functioning they are referring to how satisfying the relationship is (e.g., Saffrey, Bartholomew, Scharfe, Henderson, & Koopman, 2003), how much romantic partners desire the relationship to continue (e.g., Van Lange et al., 1997), as well as various relational problems, such as infidelity (e.g., Foster & Campbell, 2005). In the present study, we specifically target relationship commitment: the desire to maintain the relationship.

As noted, narcissism is associated with generally poor relationship functioning. For example, individuals who are more narcissistic tend to be less committed to their romantic partners (Campbell & Foster, 2002), play games with their romantic partners (Campbell, Foster, & Finkel, 2002), commit infidelity more often than do less narcissistic people (Buss & Shackelford, 1997), and tend to be less satisfied with their relationships (Foster, Shrira, et al., 2003). Importantly, unrestricted sociosexuality is also associated with poor relationship functioning in much the same way as is narcissism. For example, less restricted individuals tend to be less committed to their romantic partners, love their romantic partners less, and commit infidelity more frequently than do more restricted individuals (Jones, 1998; Simpson & Gangestad, 1991).

Although it has been demonstrated that narcissism and relationship functioning, particularly with regard to commitment, are linked, little is known about the mechanisms that maintain this association. In one study, Campbell and Foster (2002) used the Investment Model (see Rusbult, Olsen, & Davis, 2001 for a review) to determine which components of relationship commitment were most highly associated with narcissism. Rusbult and her colleagues suggest that commitment is comprised of three elements: satisfaction with the relationship, investment in the relationship, and the quality of alternative romantic partners. When satisfaction and investment are high, but quality of alternatives is low, commitment is high. Changes in any of these elements reduce commitment. Campbell and

Foster (2002) showed that narcissism is linked to low relationship commitment in part because narcissistic people perceive the quality of alternative partners to be higher than do less narcissistic people. In other words, because narcissistic romantic partners tend to think that options outside their relationships are appealing (i.e., perception of alternative partners is favorable), they are less committed to maintaining their relationships with their current partners.

Sociosexuality, narcissism, and relationship commitment

Although there is some research that has investigated the link between narcissism and commitment, it has not examined the role that sexuality (an important component to many relationships) may play in this association. We therefore propose a model in which sociosexuality plays an explanatory role in the relationship between narcissism and commitment. In Study 1, we demonstrated that narcissism is linked to unrestricted sociosexuality by way of agentic conceptualizations of sex and an emphasis placed on physical pleasure as an outcome of sex. The next prediction in our proposed model is that unrestricted sociosexuality will be linked to lower relationship commitment. This prediction has been demonstrated previously as well (Jones, 1998). Simpson and Gangestad (1991) suggest that restricted individuals are more likely to choose romantic partners based on characteristics that promote commitment, such as shared interests and attitudes. Unrestricted individuals, however, are more likely to select participants based on characteristics that do less to promote commitment, such as physical attractiveness. In support of this, Simpson and Gangestad showed that unrestricted individuals are both more attracted to and more likely to be dating someone who is physically attractive rather than affectionate, loyal, or a good potential parent.

Jones (1998) further asserts that unrestricted individuals are less likely to be involved in relationships for intrinsic reasons, such as being close and intimate with their partners. Fletcher, Fincham, Cramer, and Heron (1987) showed that romantic partners involved in relationships for intrinsic reasons were more likely to report high commitment. In short, the research suggests that individuals with unrestricted sociosexual orientations enter and maintain romantic relationships for reasons other than those that promote interpersonal closeness and commitment. Unrestricted individuals are more inclined to establish relationships with others who possess traits that satisfy their egoistic desires, such as being physically attractive. Therefore, it is reasonable to predict that those who adopt an unrestricted sociosexual orientation will be on average less committed to their romantic partners.

Thus far our proposed model, based on the results of Study 1 and prior research, predicts that (a) narcissism is associated with unrestricted sociosexuality, and (b) unrestricted sociosexuality is associated with low relationship commitment. Importantly, both of these links stem in part from what may be characterized as agentic interpersonal orientations of both narcissistic individuals and individuals with unrestricted sociosexual orientations.

Therefore, the final prediction of our proposed model is that the association between narcissism and low relationship commitment will be explained (i.e., mediated) by unrestricted sociosexuality.

Method

Participants

A sample of 125 women and 88 men (M age = 19.6; 83% Caucasian) was recruited for this investigation. All reported involvement in romantic relationships at the time of the investigation that were at least 3 months in length (M = 1.8 years). Nearly all of the participants (93%) characterized their relationships as dating in nature.

Materials and procedure

Participants completed self-report measures of narcissism, sociosexuality, and relationship commitment. *Narcissism* was again assessed with the NPI (M = 17.3, SD = 6.60, α = .82). *Sociosexuality* was again assessed with the SOI (α = .83). As in Study 1, we calculated factor scores for SOI using Thurstone's (1935) regression method (M = 0, SD = .92; scores ranged from -.92 to 3.48).

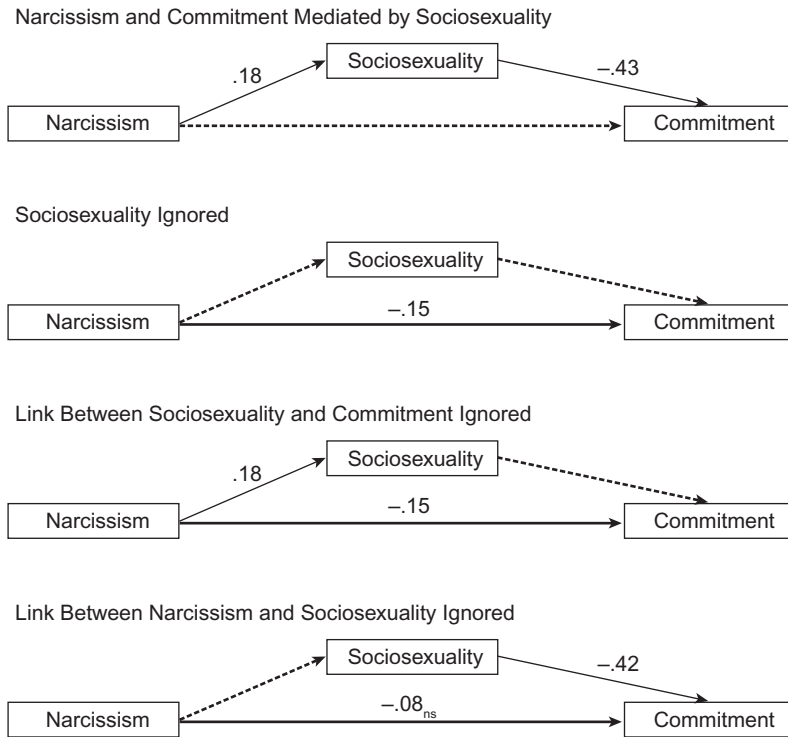
Relationship commitment was measured via the commitment subscale of the Investment Model Scale (RCS; Rusbult, Martz, & Agnew, 1998). Participants were asked to report their level of agreement to each of the 7 items on a 9-interval scale from 'do not agree at all' to 'agree completely.' Total scores could range from 0 to 56, with higher scores indicative of greater commitment to their current relationships (M = 48.3, SD = 11.2, α = .93).

Results and discussion

We used LISREL (Joreskog & Sorbom, 1993) to test the structural equation model in which sociosexuality mediates the link between narcissism and commitment (i.e., Narcissism and Commitment Mediated by Sociosexuality; see Figure 2). Specifically, we constrained to 0 the direct path from narcissism to commitment. According to our model, the direct path from narcissism to commitment is not theoretically important when sociosexuality is considered. We then estimated the indirect paths from narcissism to commitment via sociosexuality. That is, we allowed LISREL to freely estimate both (a) the path from narcissism to sociosexuality and (b) the path from sociosexuality to commitment, while constraining the path from narcissism to commitment to 0. If this model fits the data, we have evidence of significant mediation (in other words, the direct path from narcissism to commitment is uninformative when one considers the indirect path from narcissism to commitment via sociosexuality). Both the χ^2 test (df = 1, N = 213) = 1.45, p = .23, and goodness of fit indices indicated good model fit (NFI = .97, CFI = .99, RMSEA = .05, SRMR = .03) supporting our proposed model in which unrestricted sociosexuality explains the relationship between narcissism and relationship commitment.

We next contrasted our proposed model with an alternative model in which sociosexuality does not play an explanatory role in the relationship between narcissism and commitment. This model suggests that narcissism and commitment are linked, ignoring the contribution of sociosexuality. Thus, we

FIGURE 2
Competing models of narcissism and commitment.



Note. Numbers represent standardized path coefficients. All estimated path coefficients are significant (i.e., $p < .05$) except where noted. Dashed lines indicate that path coefficients have been constrained to 0. Solid lines indicate that path coefficients have been freely estimated.

constrained to 0 the paths from narcissism to sociosexuality and from sociosexuality to commitment and allowed LISREL to estimate the direct path from narcissism and commitment. If the fit of this alternative model is high, then it suggests that sociosexuality is uninformative to the relationship between narcissism and commitment. If the fit of this model is poor, then it suggests that we need to account for the role of sociosexuality when examining the link between narcissism and commitment. Finally, this model contains an unmediated path from narcissism to commitment. We can therefore test whether this path is statistically significant by itself.

Model fit was very poor [$\chi^2(df = 2, N = 213) = 47.33, p < .001, NFI = .08, CFI = .06, RMSEA = .31, SRMR = .19$], suggesting that sociosexuality should be included in the model of narcissism and commitment. Thus, we retained our proposed model over this competing model. Additionally, the unmediated path between narcissism and commitment was statistically significant, suggesting that, in the present study, narcissism was associated with lower relationship commitment. Again, however, this path was explained by the paths between (a)

narcissism and unrestricted sociosexuality, and (b) unrestricted sociosexuality and low relationship commitment.

Finally, we contrasted our proposed model with two additional alternative models, each with a single path removed. Importantly, whereas our first alternative model ignored all links involving sociosexuality, these two alternative models ignore only one of the links involving sociosexuality, leaving the other to be freely estimated. Therefore, these two alternative models must display fit that is equal to or greater than our first alternative model. Consequently, comparing our proposed model with these two alternative models provides a more rigorous model comparison.

We contrasted our proposed model initially with a model that accounts for the links between narcissism and sociosexuality, and narcissism and commitment, but ignores the link between sociosexuality and commitment. In this alternative model, narcissism is directly linked to sociosexuality and commitment, but the link between sociosexuality and commitment is uninformative to the model. The fit indices all suggest poor model fit [$\chi^2(df = 1, N = 213) = 40.35, p < .001, NFI = .21, CFI = .18, RMSEA = .41, SRMR = .17$]. Thus, we reject this alternative model and retain our proposed model.

The second alternative model contains paths from narcissism to commitment and from sociosexuality to commitment, but ignores the link between narcissism and sociosexuality. In this model, narcissism is linked to commitment, as is sociosexuality, but the link between narcissism and sociosexuality is uninformative to the model. Although the fit indices of this model were somewhat better than the previous alternative model, they still did not suggest acceptable model fit [$\chi^2(df = 1, N = 213) = 6.98, p < .01, NFI = .86, CFI = .88, RMSEA = .17, SRMR = .08$]. Thus, again we reject this model and retain our proposed model.

Summary

Our proposed model of narcissism, relationship commitment, and sociosexuality was supported by the data and provided better fit to the data than did three reasonable alternative models, each ignoring one or more components of our proposed model. In our proposed model, the link between narcissism and lower relationship commitment is explained by (a) the association between narcissism and unrestricted sociosexuality, and (b) the association between unrestricted sociosexuality and low relationship commitment. That is, lower relationship commitment reported by narcissistic romantic partners is explained by their unrestricted sexual attitudes and behaviors.

General discussion

The purpose of the present set of studies was to examine the antecedents and consequences of sexuality as they relate to narcissism. To this end, theoretical models of narcissism, sociosexuality, and commitment were tested across two studies. Across the studies, we examined the roots of unrestricted sociosexuality in narcissism (Study 1) and then used sociosexuality to explain the lack of relationship commitment reported by narcissistic

romantic partners (Study 2). Consistent with our models, greater narcissism was associated with less restricted sociosexuality in Study 1 and in Study 2. Consistent with our model of narcissism and sexuality, agentic conceptualizations of sexuality mediated the relationship between narcissism and unrestricted sociosexuality, in part because of the association between agentic sexual concept and the relative lack of importance placed upon emotional intimacy as a sexual outcome. Additionally, and consistent with our model of narcissism and relationship commitment, unrestricted sociosexuality accounted for the negative association between narcissism and relationship commitment. Because these models focus on different aspects of narcissism and sexuality (i.e., antecedents and consequences), we tested them in two separate studies. It is important, however, to view the results of the present studies as a whole to fully appreciate the ramifications of this research.

The findings of the present investigation suggest that individuals with narcissistic personalities tend to have somewhat different views of sexuality. Consistent with the agentic orientation of narcissism (Bradlee & Emmons, 1992; Campbell, Rudich, & Sedikides, 2002), and more specifically with the Agency Model (Campbell et al., 2006), and indeed with Freud's (1914) conceptualization of narcissism as a redirection of libidinal energy towards the self, narcissism was associated with what can be thought of as an egoistic bias in the sexual domain: sex to a romantic partner high in narcissism appears to be characterized by higher individuality rather than shared intimacy. As we proposed, the agentic nature of sexuality characteristic of individuals high in narcissism is associated with a devaluing of communal rewards of sexual intercourse (e.g., emotional intimacy), and with greater value placed upon agentic rewards (e.g., physical pleasure). This orientation is predictive of less restricted sexual attitudes and behaviors, which helps to explain why narcissistic individuals tend to be less committed to their romantic partners than are less narcissistic people.

The present studies expand upon our knowledge of narcissism, sex, and relationships in several important ways. First, although it has been demonstrated before that narcissism and unrestricted sociosexuality are linked (Reise & Wright, 1996), no empirical evidence existed previously as to why this link exists. Nor has this linkage been used to explain why narcissistic romantic partners report lower relationship functioning – specifically, lower commitment to their relationship partners – than do romantic partners with lower levels of narcissism. The present investigation offers empirically tested theoretical models that provide an initial step toward understanding this potentially complex relationship.

Although researchers are aware that people with higher narcissism levels report a generalized agentic bias (Bradlee & Emmons, 1992) that extends to their romantic relationships (Campbell, 1999; Campbell et al., 2006), it has never been empirically demonstrated that narcissism is associated with a similar bias with regard to sexuality. The present study offers evidence that people who are more narcissistic conceptualize sex somewhat more agentially, and that they place somewhat greater importance on agentic

sexual outcomes than do individuals with less narcissistic personalities. This conceptualization of sexuality by individuals higher in narcissism helps to explain their reported sexual attitudes and behaviors. It also seems to be a reason why narcissistic individuals often report relatively low relationship commitment.

In this article, we hypothesized that the link between narcissism and low relationship commitment is explained by the unrestricted sociosexual nature of individuals with elevated levels of narcissism. The rationale for this hypothesis stems from prior research by Simpson and Gangestad (1991, 1992) and Jones (1998). They suggest that individuals with unrestricted sociosexual orientations are not motivated to enter and maintain romantic relationships for reasons that promote commitment. For example, Jones (1998) demonstrated that, whereas restricted sociosexuality is associated with intrinsic motivations to form and maintain relationships, such as desire for closeness, unrestricted sociosexuality is not. Similarly, Simpson and Gangestad (1992) found that unrestricted individuals are more likely to select romantic partners who possess traits such as physical attractiveness rather than communally oriented traits such as being affectionate.

The Agency Model (Campbell et al., 2006) paints a very similar portrait of narcissism and relationships. Campbell (1999) found that narcissistic individuals are more attracted to others who possess traits that can personally benefit them (e.g., physical attractiveness) rather than those that may benefit the relationship (e.g., being emotionally intimate). The results of the present set of studies are highly consistent with both of these lines of research. In Study 1, we found that people who are higher in narcissism tend to possess somewhat less restricted sociosexual orientations, and that this is explained by their views of sex as a means of personal gains rather than shared rewards. In Study 2, we demonstrated that the agentic bias of narcissism, which manifests itself as unrestricted sociosexuality, predicts their somewhat lower relationship commitment, perhaps via the interpersonal motivations associated with unrestricted sociosexuality.

Caveats and future research

As with all studies, the present set of studies is not without its limitations. We used retrospective measures, which are frequently less externally valid than objective behavioral observations. This may be especially problematic considering the egoistic bias that narcissistic people report. For example, it is possible that narcissistic participants provided inflated reports of sexual behavior to appease their personal needs. Future research, might employ diary methods of assessment, particularly when assessing aspects of sexual behavior, which can easily be forgotten or misremembered (Downey, Ryan, Roffman, & Kulich, 1995).

Additionally, the present studies used correlational methods to investigate narcissism, sexuality, and commitment. Causal relations among any of the variables investigated could not be determined via correlational analyses. We attempted to remove some of the ambiguity by developing theoretically derived directional models. To improve upon this further,

however, future studies should incorporate experimental or cross-lagged designs to determine whether causation may be inferred from the associations presented herein. For example, we assume that narcissism, a fairly stable trait, is the underlying factor that drives sexual behaviors and attitudes (but see Foster, Campbell, & Twenge, 2003 for an examination of potential long-term fluctuation in narcissism). It might be, however, that the behaviors and attitudes we investigated caused participants to exhibit narcissistic tendencies. Future investigations may serve to isolate and investigate the mechanisms of these relationships.

Finally, some may question the utility of the present set of results considering the size of the statistical associations reported. Associations tested in our models ranged from approximately $r = .15$ to $r = .25$. These correlations range from 'small' to 'medium' in terms of their effect size (Cohen, 1988). Although these effect sizes are not large they are within the range of what is commonly found in the social psychological literature. The relatively modest effect sizes do, however, mean that it would be inappropriate to use any one of these measures to diagnose a person in terms of any of the other measures. For example, a person who scores very high in terms of narcissism is not necessarily going to possess unrestricted attitudes toward sex. Likewise, a person who scores very low in terms of narcissism is not necessarily going to be highly committed. There is a great deal of unexplained variability as is indicated by the size of the reported associations.

What this research does contribute is some indication as to why narcissistic individuals report lower commitment and why they report less restricted sociosexuality. It is hoped that the contribution of the present research, in combination with prior and future studies like it, will promote a more thorough understanding of narcissistic personality and how it operates within the relational domain.

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