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Self-perception of same-sex sexuality among heterosexual women: Association with personal need for structure

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Though sexuality is often described categorically, the sexual experiences that form the basis of heterosexuals’ self-perceived sexuality are often not clear cut and can be open to interpretation. Factors other than actual sexual experiences may also be associated with self-perceptions of sexuality. The present research examined how personal need for structure (Neuberg & Newsom, 1993; Thompson, Naccarato, Parker, & Moskowitz, 2001) was associated with degree of self-perceived same-sex sexuality in a sample of 103 heterosexually identified young adult women. Results indicated that women higher in personal need for structure self-perceived less same-sex sexuality than women lower in personal need for structure, even when accounting for conservatism on gay and lesbian issues and for perceptions of the degree of same-sex sexuality experienced by other heterosexual women. We discuss implications for future research on the self-perception of same-sex sexuality in heterosexuals.

Keywords: Need for structure; Same-sex sexuality; Self-perception.

Though a person’s sexuality is often described in terms of a categorical sexual orientation—typically heterosexual, homosexual, or bisexual—this categorical identity can mask a greater degree of variability in a person’s self-perception of his or her own sexuality. Similar to the way people who identify with the gender category of woman can perceive themselves to be more or less feminine or masculine (Bem, 1974), heterosexually identified individuals, in particular women (Baumeister, 2000), can vary in the degree to which they perceive themselves as having the capacity or inclination to experience any same-sex behaviors, attractions, or fantasies (Laumann, Gagnon, Michael, & Michael, 1994). What is not well understood are the factors that may be associated with the degree to which heterosexually identified individuals self-perceive same-sex sexuality.

In this article we first review research documenting the variability in self-perceptions of same-sex sexuality. Next we review empirical research and theory supporting the assertion that differences in self-reported same-sex sexuality among
heterosexually identified women may be explained in part by factors other than their actual sexual experiences. Then, using survey methods, we test whether individual differences in need for structure (Neuberg & Newsom, 1993) are associated with the degree of same-sex sexuality reported by heterosexually identified college women.

Variability in Women’s Self-perception of Same-sex Sexuality

Today, it is well understood that there are differences among heterosexually identified women in the degree to which they self-perceive same-sex sexuality. In a recent sample of 243 heterosexually identified college students from the Northeastern United States, Vrangalova and Savin-Williams (2010) found that 84% of women but only 51% of men reported at least some same-sex attraction, fantasy, or behavior. In his book, The New Gay Teenager, Savin-Williams (2005) argued that young people of the current generation may be more flexible in their sexuality and comfortable with same-sex sexuality than their parents and grandparents. Nonetheless, data from samples including previous generations of heterosexually identified women also report instances of same-sex sexuality. For instance, in one nationally representative sample of 3,432 American men and women between the ages of 18 and 59, only 1.4% of women identified with a same-sex sexual identity (e.g., lesbian or bisexual), but 7.5% of women reported some form of same-sex attraction or interest (Laumann et al., 1994, p. 297).

In reviews of the relevant literature, Baumeister (2000) and Peplau (2003) concluded that women’s sexuality is more flexible and situation-dependent than is men’s sexuality, leading to greater incidence of variability over time and across context in self-perceived sexuality and in sexual behavior. This point is echoed in findings from Diamond’s (2008a) 10-year longitudinal study of sexual minority women. Diamond repeatedly interviewed women who initially adopted a sexual minority identity (lesbian, bisexual, “unlabeled”). Over time, she documented what she termed “sexual fluidity”—“situation-dependent flexibility in women’s sexual responsiveness” among many of the women in the sample (2008b, p. 3). For example, Diamond found that regardless of whether they eventually switched to a heterosexual or lesbian identity, women who initially identified as bisexual or unlabeled continued to show patterns of attraction to both men and women (2008a).

Considerable cross-sectional and longitudinal research demonstrates that heterosexually identified women’s self-perceptions of same-sex sexuality can vary, regardless of their chosen categorical sexual identity. What is not as clear is which factors predict women’s self-perception of same-sex sexuality.

Explaining Variability in the Self-perception of Same-sex Sexuality

Certainly, actual experiences of same-sex fantasies, attractions, or behaviors can shape peoples’ perceptions of their own sexuality. Research shows that the actual experience of same-sex fantasy, attraction, or behavior is associated with factors such as gender non-conformity (Bailey, Dunne, & Martin, 2000) and liberal attitudes towards sexuality (Vrangalova & Savin-Williams, 2010). But are there also factors unrelated to actual sexual experiences that can affect an individual’s perception of his or her sexuality? We suggest that both the ambiguity that is often inherent in sexuality and the role that motivation may play in the interpretation of sexual experiences set the stage for non-sexual factors to shape self-perceptions of sexuality.
Ambiguity Underlying the Self-perception of Sexuality

Human sexuality involves many components including sexual behavior, physical attraction, fantasy, romantic attraction, and sexual identity (Klein, Sepekoff, & Wolf, 1985; Savin-Williams & Ream, 2007). These different components do not always perfectly align. As was reviewed earlier, research indicates that it is not uncommon for a woman who identifies as heterosexual to be attracted to another woman. Such disparities among elements of sexuality may be particularly common among young people (Savin-Williams, 2005) and women (Peplau, 2003). Further, the consistency that an individual experiences among the components of sexuality may vary across different times and contexts (Diamond, 2008b; Savin-Williams & Ream, 2007). Therefore, when people are asked the degree to which they perceive that they experience same-sex sexuality, it may be unclear which component(s) and/or which contexts to weigh most heavily in that perception. Is a college woman’s romantic relationship with her boyfriend more or less indicative of her sexuality than her erotic fantasies about a female friend? Should she draw more from the sexual experiences she has while away at college or while at home?

Even the definition of what constitutes a sexual experience can be ambiguous. When undergraduates in one study were asked whether they would say they “had sex” if oral-genital contact was the most intimate behavior in which they had engaged, 40% said yes but 60% said no (Sanders & Reinisch, 1999). The same act was defined as “sex” by some people but not by others. Similarly, a study found that while men and women aged 18 to 35 uniformly believed that virginity is lost when consensual penile-vaginal intercourse occurs, some reported that other types of genital contact (e.g., oral-genital) can also result in virginity loss (Carpenter, 2001). In this case, individuals differed in the sex acts they defined as leading to a loss of virginity.

These studies have demonstrated ambiguity in the interpretation of concrete sexual experiences such as oral sex; it is easy to imagine that even greater ambiguity may apply to the interpretation of sexual attraction or fantasies. Currently, a popular lay term used to describe ambiguity in female-female attraction is “girl crush.” A New York Times article described a girl crush as a “fervent infatuation that one heterosexual woman develops for another woman who may seem impossibly sophisticated, gifted, beautiful or accomplished” (Rosenbloom, 2005), as in “I have a ‘girl crush’ on that singer because she is so talented.” Consistent with previous work on the misattribution of arousal (e.g., White, Fishbein, & Rutstein, 1981), these women may experience a general arousal in the presence of a particular woman, which they may interpret as sexual attraction or merely a girl crush.

People must organize their often complex and ambiguous sexual experiences, interpreting their relevance to the self-concept and use this organization of past experiences to filter and organize future experiences (Markus, 1977). People draw on this subjectively filtered organization of their experiences to perceive their own sexuality.

Motivation and Self-perception of Same-sex Sexuality

When a heterosexually identified person self-perceives any degree of same-sex sexuality, they are contesting the Western norm that one’s sexuality should conform to one of the three big categories: heterosexual, homosexual, or bisexual (e.g.,
The motivation to conform to cultural dictates can play a role in shaping a person’s self-perception of their sexuality. Hammack (2005) described the conflict between lived experience and cultural norms in these terms:

In . . . our culture and historical time . . . a categorical system of identity possibilities is imposed on an underlying dimensional experience of far greater affective complexity. Hence, there exists the perception of a cultural press, which motivates one to categorically self-label in a way that is most consonant with underlying sexual desire. (p. 281)

Hammack (2005) also suggested that women may feel somewhat less pressure to conform than men because of differences in “gender-specific cultural models of sexuality” (p. 280).

To summarize, the potential ambiguity of sexual experiences offers individuals a degree of flexibility in interpreting their attractions, fantasies and behaviors. Because mainstream Western culture views sexuality in categorical terms, individuals are motivated to interpret their experiences in ways that enhance consistency among the components of sexuality and, often, that favor the socially approved category of heterosexuality. Women generally show greater sexual fluidity than men, perhaps in part because, as Hammack suggested, cultural pressures toward conformity are greater for men. However, a question remains: why are some heterosexually identified women more comfortable than others about perceiving their personal experiences as reflecting same-sex sexuality?

Self-perception of Sexuality and Individual Differences: Personal Need for Structure

Hammack (2005) focused on cultural contexts as the factor that acts on self-perceptions of same-sex sexuality. However, it is clear that even in the same cultural context, different heterosexually identified individuals may vary in the degree to which they feel comfortable self-perceiving same-sex sexuality. Consider two heterosexually identified women who have the same dream about kissing another woman. One woman, who tends to think about things in simple, black and white terms, may dismiss the dream as irrelevant to her sexual orientation, thereby maintaining her clear-cut, categorical heterosexual identity. In contrast, the other woman who tends to think about things in more complex, nuanced ways may be more comfortable calling that dream a “same-sex” experience and may, in turn, perceive her global heterosexual identity as encompassing occasional same-sex fantasies.

In more technical terms, these women differ in their personal need for structure. Personal need for structure is the desire and tendency to organize one’s world in simplified categories, avoiding ambiguity in cognitive representations of social and nonsocial information (Neuberg & Newsom, 1993; see Thompson et al., 2001, for a review). People high in personal need for structure simplify across a variety of domains. They are more likely to create fewer and simpler categories when organizing information about the self, the elderly, furniture, and colors (Neuberg & Newsom, 1993); to form spontaneous trait inferences, quickly creating simplified representations of other people’s characters from their behavior (Moskowitz, 1993); to stereotype others and, more specifically, to form inaccurate stereotypes (Schaller, Boyd, Yohannes, & O’Brien, 1995); and to be susceptible to using non-diagnostic, heuristic information to make judgments (Kemmelmeier, 2007). In other words,
people high in personal need for structure, relative to those low in personal need for structure, are strongly motivated to avoid ambiguity and to organize information in simple ways. It follows that heterosexually identified women high in personal need for structure, relative to those low in personal need for structure, would be motivated to interpret and organize any ambiguous, potentially same-sex experiences in a way that reaffirms their categorical heterosexual identity.

Importantly, it is unlikely that personal need for structure is directly related to actual physiological sexual arousal. Personal need for structure is an information-processing motive, impacting the way people interpret and organize information across domains. There is no evidence that people who experience more same-sex sexual desires or behaviors are lower in personal need for structure than those who experience fewer same-sex sexual desires or behaviors. Measures of personal need for structure assess how information is likely to be interpreted and organized after it is “input” to the cognitive system.

Furthermore, personal need for structure should not necessarily be related to general attitudes towards same-sex sexuality. The only study examining the association between personal need for structure and negative attitudes towards same-sex sexuality found a significant but weak relationship ($r = .16$) among a sample of 539 male and female college students (Smith & Gordon, 1998). Conceptually, the lack of a strong relationship between the two makes sense. A person high in personal need for structure could firmly believe that people are either “gay” or “straight,” but nonetheless feel positively toward both groups. On the other hand, a person low in personal need for structure could believe that distinctions between “gay” and “straight” are not clear-cut but hold negative views toward same-sex sexuality.

Study Goals

We predicted that individuals high in personal need for structure would report less same-sex sexuality than individuals low in personal need for structure. The current study tested this prediction in a sample of heterosexually identified female college students. We selected heterosexually identified young adult women because research has found that they are more likely than heterosexually identified older adults or men to experience same-sex sexual desires and arousal (Baumeister, 2000; Chivers & Bailey, 2005; Peplau, 2003; Savin-Williams, 2005).

Further, to determine whether any association between personal need for structure and self-reported same-sex sexuality could be an artifact of individuals’ general attitudes toward same-sex sexuality, we included two additional individual differences measures: a measure of perceptions of other heterosexually identified women’s same-sex sexuality and a measure of conservatism on gay and lesbian issues. This permitted us to test the prediction that personal need for structure would account for unique variance in self-perception of same-sex sexuality, above and beyond what was explained by broader attitudes towards same-sex sexuality.

Method

Participants

Participants were female undergraduate students at the University of California, Los Angeles (UCLA), recruited online from the psychology undergraduate subject pool’s
website or through targeted advertising to UCLA undergraduates on the social networking site www.thefacebook.com. A total of 107 women completed the protocol. However, analyses were limited to 103 participants under the age of 25 who self-identified as heterosexual. Their mean age was 20 years ($SD = 1.4$ years).

**Measures**

*Perception of same-sex sexuality.* To assess participants’ self-perceptions of same-sex sexuality and their perceptions of other heterosexually identified women’s same-sex sexuality, we used a measure of “sexual fluidity.” The survey defined sexual fluidity for participants as:

> [T]he degree to which you have and will likely in the future engage in sexual behaviors with both men and women across different times and/or contexts, be sexually attracted to both men and women across different times and/or contexts, sexually fantasize about both men and women across different times and/or contexts, and be romantically attracted to both men and women across different times and/or contexts.

This definition of sexual fluidity was derived from Diamond’s (2008b) definition of sexual fluidity as “situation-dependent flexibility in sexual responsiveness.” Participants used this definition to rate their own sexual fluidity on a 7-point scale ranging from 1 (**Not at all flexible**) to 7 (**Completely flexible**). They also used the same scale to rate the “average heterosexual woman your age.” In our sample, the mean score was 2.96 ($SD = 1.32$) for participants’ self-perceptions and 3.50 ($SD = 1.47$) for participants’ ratings of the average woman their age.

*Personal need for structure scale.* The Personal Need for Structure scale is a 12-item self-report inventory designed to measure the chronic aversion to ill-structured situations and a longing for certainty and predictability (Thompson, Naccarato, & Parker, 1989). Personal need for structure has been associated with the tendency to organize social and non-social information in simple structures (Neuberg & Newsom, 1993). Participants indicated their level of agreement or disagreement with statements such as “I enjoy having a clear and structured mode of life,” “I hate to change my plans at the last minute,” and “I don’t like situations that are uncertain.” We utilized a 5-point scale ranging from “**strongly disagree**” to “**strongly agree**.” In our sample, the mean was 3.34 ($SD = 0.44$). The Cronbach’s $\alpha$ was .77.

*Conservatism on gay and lesbian issues.* Participants were asked: “Which of the following best describes your political position regarding gay and lesbian issues?” Participants responded using a 5-point scale ranging from 1 (**Very conservative**) to 5 (**Very liberal**). This scale was reverse-coded to be interpreted as conservatism on gay and lesbian issues. The mean of this reverse-coded item was 3.7 ($SD = 0.10$), indicating an average position for the sample of slightly more conservative than “moderate” on gay and lesbian issues.

**Procedure**

To provide greater privacy and to promote honest responding about potentially sensitive questions, participants completed the survey online. Both participants recruited from the subject pool and from Facebook were redirected from the recruitment website to the study website. On the consent form all participants were
informed that their responses were confidential and that any identifying information collected would not be linked to their data. The only identifying information collected was an e-mail address. This address was used to assign course credit for subject-pool participants or as entry into a raffle for a $25 Amazon.com gift certificate for Facebook participants. After consenting to participate in the study, all participants answered the questions, read a debriefing description, and were given the opportunity to e-mail questions or comments to the researcher.

Results

Correlations with Ratings of Sexual Fluidity

In order to test whether self-perception of sexual fluidity would vary with individual differences in personal need for structure, we conducted a bivariate correlation. As predicted, self-perception of sexual fluidity was significantly negatively correlated with personal need for structure ($r = -.25, p < .05$). Additionally, self-perception of sexual fluidity was significantly negatively correlated with conservatism on gay and lesbian issues ($r = -.35, p < .001$) and positively correlated with perception of other heterosexually identified women’s sexual fluidity ($r = .57, p < .001$).

Further bivariate correlations were conducted to examine the relationship between personal need for structure and broader, non-self-specific attitudes towards same-sex sexuality. Personal need for structure was not correlated with conservatism on gay and lesbian issues ($r = .08, p = .42$) nor with perception of other heterosexually identified women’s sexual fluidity ($r = -.02, p = .81$).

Age was the only additional demographic variable measured in this short survey. It did not correlate significantly with any of the variables of interest.

Assessing the Unique Relationship between Sexual Fluidity and Personal Need for Structure

Hierarchical linear regression analyses were conducted to assess whether personal need for structure would be significantly associated with self-perception of sexual fluidity above and beyond what was accounted for by general attitudes towards same-sex sexuality. Table 1 presents the results of the two regression models that tested: (1) a single-predictor model regressing self-perception of sexual fluidity on personal need for structure; and (2) a three-predictor model regressing self-perception of sexual fluidity on personal need for structure, conservatism, and perceived sexual fluidity of other heterosexually identified women. All variables and

| TABLE 1  Comparison of Models Predicting Ratings of Sexual Fluidity |
|-----------|-----------------|------|------|----|
| Model    | Predictor        | $R^2$ | $\Delta R^2$ | $\beta$ |
| 1        | Personal need for structure | .06* | .06* | $-0.25*$ |
| 2        | Personal need for structure | .43*** | .37*** | $-0.21**$ |
|          | Conservatism     |      |      | $-0.25**$ |
|          | Perception of other women |      |      | $0.52***$ |

Note: *$p < .05$; **$p < .01$; ***$p < .001$. 

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models were checked for skew, heteroscedasticity, and normality of errors. All diagnostics were within normal ranges.

The first single-predictor model replicates what was shown in the bivariate correlation: Personal need for structure was significantly and negatively associated with self-perception of sexual fluidity, $F_{model1}(1, 101) = 6.56, p < .05$. As predicted, when conservatism and perceived sexual fluidity of other heterosexually identified women were entered in the second model, personal need for structure was still uniquely associated with self-perception of sexual fluidity, $F_{model2}(3, 99) = 25.27, p < .001$. See Table 1 for effects of each predictor.

Finally, we ran interaction analyses to ensure that personal need for structure uniquely predicted variance in self-perception of sexual fluidity and was not as part of an interaction with either conservatism or perception of other heterosexually identified women. Neither of these interactions was statistically significant.

**Discussion**

The findings of the present study support the hypothesis that non-sexual factors, such as the motive to perceive the world in an organized, categorical way, may influence how heterosexually identified individuals perceive their own sexuality. Specifically, we found that individual differences in personal need for structure were significantly associated with heterosexually identified women’s self-reports of same-sex sexuality, even after controlling for more general attitudes towards same-sex sexuality. Because personal need for structure assesses how individuals cognitively organize information, there is little reason to believe that it directly affects sexual arousal or desires. Additionally, we ruled out the possibility that personal need for structure is associated with self-perception of same-sex sexuality because it is associated with general attitudes towards same-sex sexuality. We did this by demonstrating that the association of personal need for structure and self-perceived same-sex sexuality remained after controlling for two other factors: general conservatism on gay and lesbian issues and perceptions of other women’s sexual fluidity. This study supports the idea that individual differences in the cognitive organization of information unrelated to sexuality can nonetheless play a role in how people understand their own sexuality.

While previous research has documented that women’s sexual experiences and attractions can fluctuate across time and context (Diamond, 2007; Peplau & Garnets, 2000), this research is the first to explicitly test the possibility that heterosexually identified women’s perceptions of their own sexuality may also be associated with more basic cognitive factors. Because this study was correlational, it does not definitely demonstrate a causal role for individual differences in the cognitive organization of information. However, given what we know about the nature of individual differences in personal need for structure and what is suggested by our statistical analyses, this study suggests the usefulness of investigating the interpretation and organization of actual sexual experiences as a mechanism for variability in the self-perception of same-sex sexuality.

Additionally, other non-sexual factors may also be associated with self-perceptions of sexuality. For example, the desire to avoid the prejudice and discrimination associated with publicly acknowledging that one experiences same-sex sexuality (Herek, 2009) could result in a tendency to interpret ambiguous same-sex experiences as irrelevant to one’s sexuality. On the other hand, if a woman
identifies as lesbian and has strong ties to the lesbian community, she may be motivated to interpret an ambiguous sexual experience with a man as irrelevant to her sexuality in order to maintain her place in the lesbian community.

This study did not address variability in sexual identity, but there is ample evidence that some individuals change their sexual identity label across time and/or context (e.g., Diamond, 2003; McConaghy & Armstrong, 1983; Savin-Williams & Diamond, 2000). Furthermore, while many individuals hold exclusive sexual identities (e.g., heterosexual and homosexual), others hold less traditional and more flexible sexual identities (e.g., bisexual, mostly straight; see Thompson & Morgan, 2008). Research examining factors other than sexual experience which predict these fluctuations within individuals and differences between individuals would be valuable. For example, in a review of clinical and empirical studies on bisexuals, Zinik (1985) concluded that different individuals may experience bisexuality as a "desirable form of flexibility" or as an unwanted conflict. This finding suggests the possibility that the adoption of a bisexual label or discomfort with that label may be associated with an individual difference such as need for structure.

Although this research adds to our understanding of non-sexual factors that are associated with self-perceptions of same-sex sexuality in heterosexually identified individuals, the study has several limitations that could be addressed by future research. The current study investigated the experiences of college women from southern California; it would be useful to extend this work to other populations, men in particular. Though to a lesser degree than women, heterosexually identified men do self-perceive same-sex sexuality (e.g., Bailey et al., 2000; Ellis, Robb, & Burke, 2005; Vrangalova & Savin-Williams, 2010), and it is important to investigate whether the factors associated with women's self-perceptions of same-sex sexuality are also associated with those of men.

Additionally, this study assessed self-perception of same-sex sexuality with a single measure. Future research should use multiple measures to examine distinct components of sexuality, including separate assessment of behavior, attraction, and fantasy. Based on previous research, we anticipate that components with greater potential for multiple interpretations (e.g., fantasy) will have a stronger association with non-sexual factors than components that are less ambiguous (e.g., behavior). Furthermore, we proposed that the mechanism of the association between need for structure and self-perception of same-sex sexuality is due to a selective interpretation of ambiguous experiences. Future research should explicitly measure the interpretation of experiences as a predictor of self-perceived same-sex sexuality.

The current correlational study provided support for the hypothesized relationship between non-sexual factors and self-perceptions of same-sex sexuality. It would be valuable for future studies to develop experimental paradigms to more directly assess the causal influence of non-sexual factors on self-perception of sexuality. In a study currently underway, we are experimentally testing the impact of perceptions of stigma against or support for same-sex sexuality on self-perceptions of same-sex sexuality (Preciado, Peplau, & Johnson, 2009).

The investigation of non-sexual factors that influence how individuals interpret and organize their sexual experiences holds promise for illuminating how individuals construct their perceptions of their own sexuality. Future research in this area will help to elucidate the processes underlying the maintenance and change of self-perceptions of sexuality.
References

sexual orientation and its correlates in an Australian twin sample. *Journal of Personality


Clinical Psychology, 42*, 155–162.


Psychology & Human Sexuality, 18*, 245–274.

Diamond, L. M. (2008a). Female bisexuality from adolescence to adulthood: Results from a

MA: Harvard University Press.


sexual minority youth: Context, desire, and narrative. *Journal of Youth and Adolescence,
38*, 867–883.

Herek, G. M. (2009). Hate crimes and stigma-related experiences among sexual minority
adults in the United States: Prevalence estimates from a national probability sample.
*Journal of Interpersonal Violence, 24*, 54–74.

Kemmelmeier, M. (2007). Does the dilution effect have a conversational basis? *Journal of
Language and Social Psychology, 26*, 48–60.


of sexuality: Sexual practices in the United States*. Chicago, IL: University of Chicago
Press.

Associates.

Personality and Social Psychology, 35*, 63–78.


personal need for structure on spontaneous trait inferences. *Journal of Personality and


