

SEX DIFFERENCES AND SIMILARITIES IN FREQUENCY AND INTENSITY OF SEXUAL DESIRE

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Only within the past decade have social scientists commonly recognized the phenomenon of sexual desire as a distinct and vital component of human sexual response. Of the various factors believed to be associated with sexual desire, gender (biological sex) is presumed by many theorists to be one of the most important. Limited empirical work suggests that men experience desire more frequently than do women; however, sex differences in intensity or level of desire have yet to be examined. This study explored both the self-reported frequency and intensity of sexual desire among an ethnically diverse sample of 676 men and women. As hypothesized, men reported experiencing a higher overall level of sexual desire than did women. Sex differences also were found with respect to frequency of sexual desire. Men reported experiencing sexual desire more often than did women and, when asked to estimate the actual frequency with which they experienced desire, men's estimated frequency (37 times per week) was significantly higher than women's (9 times per week). These results do not imply that men always feel desire or that women lack sexual desire. In fact, virtually every participant in this study reported feeling sexual desire on a regular basis. This suggests that desire may be the most universal sexual response experienced by both men and women.

Keywords: desire, lust, sex differences, passion, gender, sexuality.

Poets, playwrights, and other artists have long touted the idea that sexual desire is a powerful force that is strongly implicated in romantic love, mate selection, and other significant interpersonal life events. In Shakespeare's *Romeo and Juliet*, for example, unconsummated sexual desire is the fire that fuels the title characters' romance and propels them to defy their families and secretly wed.

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Interestingly, social scientists have been slow to draw the same conclusions as their counterparts in the arts and letters. In fact, despite important work by clinicians and sex therapists in the 1970s and early 1980s (e.g., Kaplan, 1979; Levine, 1984), many social and behavioral researchers did not even recognize sexual desire as a distinct aspect of human sexual response until the mid-1990s (Regan & Berscheid, 1999). This may explain the relatively underdeveloped state of knowledge with respect to this particular aspect of sexuality.

In recent years, however, theorists and researchers have begun to realize that sexual desire plays a pivotal role in romantic attraction and relationship development, and they have become increasingly interested in understanding its unique nature and correlates. A number of scholars have focused on defining sexual desire and distinguishing it from other, related sexual concepts. For example, *sexual desire* is often defined as a motivational state that can be understood broadly as an interest in sexual objects (e.g., other people) or activities, or as a wish, need, or drive to seek out sexual objects or to engage in sexual activities (see Regan & Berscheid, 1999). Sexual desire is presumed to be distinct from physiological/genital sexual arousal (a state of reflex activation that involves the sex organs and nervous system; Masters, Johnson, & Kolodny, 1982, 1994), *subjective sexual arousal* (the subjective awareness of physiological/genital arousal; Green & Mosher, 1985), *sexual activity* (overt behavioral responses; e.g., kissing, “petting,” intercourse), and *sexual feeling states* that are associated with these responses (e.g., satisfaction, intimacy, fulfillment). Of course, these sexual experiences may occur, and be experienced by individuals, relatively simultaneously.

Still other scholars have focused on delineating the factors that are associated with sexual desire (see Regan, 2004). Levine (2003), for example, has identified four “master variables” that he believes are fundamentally important to the experience of sexual desire: age, health, social situation, and gender (biological sex). Of these variables, age and health have received the most sustained empirical attention. A growing body of evidence substantiates the association between an individual’s age and physical and mental health and his or her ability to feel and express sexual desire (for a review, see Regan & Berscheid, 1999). Men and women with serious physical (e.g., diabetes, cancer, Parkinson’s disease) or mental (e.g., depression) illness generally report experiencing a decrease in their overall level of sexual interest after the onset of their illness (Howell et al., 1987; Koller et al., 1990), and their desire levels are generally lower than those reported by matched control groups (Schreiner-Engel, Schiavi, Vitorisz, Eichel, & Smith, 1985). Age is also negatively correlated with sexual desire; cross-sectional research on men and women consistently demonstrates a decline in sexual interest with advancing age (Purifoy, Grodsky, & Giambra, 1992; Schiavi, Schreiner-Engel, Mandeli, Schanzer, & Cohen, 1990).

Sex or gender may be a particularly important correlate of sexual desire. Certainly there are pronounced sex differences in many aspects of sexuality, including frequency of sexual activity (e.g., masturbation), affective responses to intercourse, selection criteria for sex partners, and general sexual attitudes. Existing literature reviews indicate that men, for example, tend to hold more positive attitudes toward casual (uncommitted) sexual activity, report engaging in various forms of sexual activity to a greater extent than do women, and have a more positive emotional reaction to intercourse experiences (Oliver & Hyde, 1993; Regan, 2003; Sprecher & McKinney, 1993). Few researchers have specifically investigated sex differences in desire. However, the available studies suggest that men may experience desire more frequently than do women. For example, Useche, Villegas, and Alzate (1990) surveyed a sample of Colombian high school students and found that more young men (80%) than young women (49%) reported experiencing sexual desire at least once a week. A survey of college students yielded similar results (Beck, Bozman, & Qualtrough, 1991). Whether men also experience a higher level (as opposed to frequency) of sexual desire than do women has yet to be systematically investigated. The present study is designed to replicate and extend earlier work by examining not only the self-reported frequency of sexual desire, but also the self-reported intensity or level of sexual desire, among a large and diverse sample of men and women. Based upon a consideration of previous research (e.g., Oliver & Hyde, 1993), we hypothesized that men would report both a greater frequency and a greater intensity of desire than would women.

METHOD

PARTICIPANTS

A convenience sample of 676 men and women (335 men, 341 women) from an urban western United States university participated in this study (average age = 25 years). Participants were of diverse ethnicity: 54.8% Latino(a)/Hispanic, 15.5% Caucasian/non-Hispanic White, 13.5% Asian/Asian American, 12.0% African American, 2.6% Middle Eastern, 0.4% Native American/American Indian, and 1.2% Other.

PROCEDURE

Participants were recruited from introductory social science courses at a large western university. Participants completed the study in small groups, while seated at individual desks separated from each other by at least one other (empty) desk. Upon arrival at the research site, potential participants were informed that the present study concerned sexual desire, which was defined for them as follows (adapted from Regan & Berscheid, 1999):

Sexual desire can be understood broadly as an interest in sexual objects (e.g., other people) or activities, or as a wish, longing, or craving to seek out sexual objects or to engage in sexual activities. Sexual desire is not the same as sexual activity (e.g., kissing, masturbation, intercourse) or sexual arousal (e.g., vaginal lubrication, erections).

Participants then were asked to indicate whether or not they had ever experienced sexual desire (yes/no response options) and to rate their overall level of sexual desire on a 9-point, Likert-type scale anchored by 1 = *very little* and 9 = *a great deal*. The next three questions concerned the frequency of sexual desire. Participants were asked to rate how often they experienced sexual desire on a 9-point, Likert-type scale anchored by 1 = *never* and 9 = *extremely often*. They were also asked to estimate how often they experienced sexual desire on a daily, weekly, monthly, or yearly basis, and how often they thought about sex using the same response options (this serves as a reflection of sexual interest or desire; see Regan & Berscheid, 1999). Responses to these last two frequency questions were coded so as to reflect weekly frequency rates. When participants were finished with the questionnaire, they were instructed to place their questionnaires in a locked box located near the entrance to the research site.

RESULTS

Due to our large sample size, we conducted effect size analyses where appropriate (Cohen's d ; see Cohen, 1988), as well as standard statistical tests. The majority of participants (97.3%) reported having experienced sexual desire. However, as hypothesized, significantly more men (98.8%) than women (95.9%) indicated having experienced this particular sexual feeling, $z = 2.35$, $p < .01$. Also as hypothesized, men reported having a higher overall level of sexual desire than did women (6.91 vs. 5.63, $t[661] = 8.73$, $p < .001$; $d = .68$). Sex differences also were found with respect to frequency of sexual desire. Specifically, men reported having experienced sexual desire more often than did women (6.77 vs. 5.26, $t[671] = 9.90$, $p < .001$; $d = .76$). Similarly, when asked to estimate the actual frequency with which they experienced sexual desire, men's estimated frequency (37.00 times per week) was significantly higher than women's estimated frequency (8.67 times per week), $t(653) = 7.35$, $p < .001$, $d = .57$. Finally, men and women differed in how often they reported thinking about sex (59.66 times per week for men vs. 14.58 times per week for women, $t[651] = 6.78$, $p < .001$; $d = .53$).

TABLE 1
SEX DIFFERENCES IN FREQUENCY AND INTENSITY OF SEXUAL DESIRE

Measure	Men	Women
Percentage having experienced sexual desire	98.8*	95.9*
Self-rated intensity of sexual desire	6.91*	5.63*
Self-rated frequency of sexual desire	6.77*	5.26*
Estimated frequency of sexual desire (number of episodes per week)	37.00*	8.67*
Estimated frequency of thinking about sex (number of episodes per week)	59.66*	14.58*

Note: Starred means within each row are significantly different. Z, t, and p values are given in the text (along with effect size measures).

DISCUSSION

When considering the sexual life of men and women, the German physician and scholar, Richard von Krafft-Ebing, (1886/1945) stated, “Man has beyond doubt the stronger sexual appetite of the two” (p. 14). Although this view is clearly outdated, our own results lend some credence to the notion that men have stronger and more frequent sexual desires than do women. The higher level and frequency of desire reported by the men in this study, along with the finding that more men than women indicated having actually experienced sexual desire, suggest that sex differences do exist with respect to this particular sexual phenomenon.

These differences may reflect the operation of socialization processes that influence men’s and women’s sexual attitudes and behavior across the lifespan (see Gagnon & Simon, 1973; Hogben & Byrne, 1998; Reiss, 1981). For example, the different patterns of reinforcement and punishment that men and women receive for their sexual attitudes and behavior, coupled with the existence of normative beliefs about maleness and femaleness (e.g., men are sexual beings whose lust is ever-present and often uncontrollable; women are nonsexual creatures whose passion must be coaxed or coerced into ignition), may encourage men to focus on, enjoy, and even recall having experienced sexual desire to a greater degree than do women. It is also possible that these differences reflect the operation of internal biological forces. A large body of research links testosterone – a sex hormone synthesized primarily in the testes and the adrenal cortex, and to a lesser extent in the ovaries – with sexual desire (for a review, see Regan, 1999). Healthy men typically possess much higher amounts of testosterone than do their same-age female counterparts; thus, the higher level and frequency of desire reported by our male participants may reflect underlying hormonal differences between the sexes.

Our results do not imply that men always feel desire. [The fact that men do not is attested to by the increasing numbers who seek treatment for low or inhibited sexual desire (see LoPiccolo & Friedman, 1988).] Nor do our results imply that women are uninterested in sex or lack sexual desire. In fact, the women in this study rated their level and frequency of desire as being above average, and reported experiencing episodes of desire at least once every day (and thinking about sex approximately twice a day). What our results do suggest is that, robust sex differences notwithstanding, sexual desire may be the single most common sexual event in the lives of men and women. Virtually every participant in this study, male and female, indicated having experienced sexual desire – and they did so on a regular basis. Sexual desire clearly is an important element of most people’s sexual repertoires, and it is therefore deserving of much greater scientific attention than it has traditionally received.

We end by noting that although sex differences in desire appear to exist, studies such as ours – which assess people’s responses at one point in time – may not provide a complete picture of the dynamics of this sexual experience. For example, desire levels may fluctuate over time as a function of both internal (e.g., physical and mental health, hormone levels) and external (e.g., situational) factors (Baumeister, 2000; Regan & Berscheid, 1999). Women, who experience greater variation in hormone levels than do men, may be particularly prone to fluctuations in desire (see Regan, 1996). Thus, in any given span of time, there may be occasions when a woman’s intensity and/or frequency of desire exceeds that of her male counterpart. There may also be times when his desire exceeds hers, and times when the two experience roughly equal frequencies or levels. Unfortunately, due to the static nature of most “single-shot” studies, any such patterns or changes over time in desire cannot be explored. We encourage future researchers to conduct prospective studies in which men and women report their sexual experiences on an ongoing basis over extended periods of time.

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