

CHANGES IN SEXUALITY: HOW SEXUALITY CHANGES ACROSS TIME,
ACROSS RELATIONSHIPS, AND ACROSS SOCIOCULTURAL CONTEXTS

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Abstract

This paper reviews several mid-level theories of sexuality on the theme of changes in sexuality, which is supported by evidence that changes in sexuality occur throughout time, during the course of relationships, and depending on the larger sociocultural context. The first section covers the theory of female erotic plasticity, which suggests that women on average exhibit greater variation in their sexual attitudes, desires, and behavior over the course of their lives than men. The second section addresses changes in passion over the course of romantic relationships. Changes in intimacy within a relationship over time are hypothesized to produce temporary spikes in passion and sexual behavior. The final section reviews the theory of sexual economics, which analyzes sexual behavior according to economic principles. This theory proposes that sex is a female resource that women exchange with men for other valued rewards. Changes in the sexual marketplace affect the negotiation of sex between the genders. Although these changes in sexuality are well-documented, neuroscience research is needed to shed light on how the brain enables, responds, and adjusts to these changes.

Key words: theories of sexuality, theory of female erotic plasticity, passion, sexual behavior, sexual economics

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The two major theoretical perspectives that have served as the basis for the majority of research on human sexuality are social constructionist and essentialist theories (DeLamater and Hyde 1998). Whereas social constructionist theories propose that the basis of sexuality is culture and social influence, essentialist theories argue that biology and other innate influences drive sexuality. In spite of the advances attributable to both theoretical perspectives, we believe that sexuality research will benefit from increased attention to mid-level theories that may not be classified simply as social constructionist or essentialist. The purpose of this paper is to review three mid-level theories about sexuality, all focused on changing processes and derived from a social psychological background and that may interest neuroscientists. Cross-disciplinary research on human sexuality, particularly in neuroscience, has the potential to advance mid-level theories of sexuality by testing theories with methods unavailable to most sexologists.

Erotic plasticity

Social constructionist and essentialist theories of sexuality have traditionally ascribed human sexuality as predominantly due either to social factors or to biological factors. These approaches both assume that social or biological factors have the same degree of influence on sexuality regardless of a person's gender. (Please note that the word *gender* will be reserved to

refer to maleness and femaleness, and the word *sex* will be reserved for sex acts). In a departure from those major theoretical perspectives, Baumeister (2000) proposed that there are gender differences in the extent to which culture and nature influence human sexuality. Specifically, Baumeister theorized that women's sex drive is more responsive to cultural and situational factors than men's sex drive. That is, women display greater erotic plasticity than men. Erotic plasticity can be evidenced by changes in the object of desire (e.g., type of partner, type of sexual activity) and by changes in how sexual desire is expressed (e.g., sexual activity patterns and preferences).

Three convergent lines of evidence supported the idea that erotic plasticity is greater in women than in men. Compared to men, women demonstrate more within-person variation in sexual behavior across time. Second, women's sexuality is more responsive than men's sexuality to a variety of sociocultural variables. Third, women demonstrate lower sexual attitude-behavior consistency than men in reference to sexuality. In the following sections, we provide a sample of some of the evidence. A more complete review was provided by Baumeister (2000).

Intraindividual variability

Plasticity refers to susceptibility to change in response to external circumstances. Therefore, people

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with low erotic plasticity should demonstrate stability in their sexual attitudes, desires, and behaviors even when cultural norms and expectations change or their situation changes. Conversely, people with high erotic plasticity should demonstrate a relatively high degree of intraindividual variability in sexual attitudes, desires, and behaviors over time.

Women consistently demonstrate greater intraindividual variability in sex drive than men. Although there is no optimal way to measure sex drive, the Kinsey studies measured sex drive by assessing a person's "total sexual outlet" (Kinsey et al. 1948, Kinsey et al. 1953). This measure captures total sexual activity and was often operationalized as the total number of orgasms, including from masturbation. Kinsey found that the total sexual outlet of a typical woman varied substantially over time, whereas the total sexual outlet of a typical man tended to remain quite stable (Kinsey et al. 1953). For example, after the end of an intense love relationship, a woman might cease all sexual activity for a time, whereas a man would make up the deficit by masturbation or consorting with prostitutes.

Another way to assess intraindividual variation in sexuality is by assessing changes in partner preference or sexual orientation. In retrospective reports, homosexual women report more changes in their self-identified sexual orientation than homosexual men (Kinnish et al. 2005). Additionally, homosexual women are more likely than homosexual men to report having had sex with people of both genders (e.g., Savin-William 1990). In situations in which heterosexuality is impossible, such as prison, women are also more likely than men to engage in consensual same-gender sexual activity. In one survey of inmates, about half of the women but less than half of the men had engaged in consensual same-sex sexual activity (Gagnon and Simon 1968).

Even among heterosexuals, sexual tastes can change. Assorted evidence reviewed by Baumeister (2000) indicated that a man's preferences for sexual activity tend to remain the same throughout adult life, apart from gradually declining in intensity. Women are more likely to adopt new activities and preferences at any point in her adult life.

Sociocultural factors

The relative influence of sociocultural factors on male and female sexuality is another line of evidence supporting the idea of greater female erotic plasticity. The basic prediction is that sociocultural variables should have larger effects on female than on male sexuality. One way to test how sociocultural variables influence male and female sexuality is to compare cross-cultural variation in sexual behavior for each gender. If erotic plasticity is greater among women than among men, then there should be more cross-cultural variation in sexuality among women. Barry and Schlegel (1984) compared ethnographic data on adolescent sexual behavior in 186 cultures. Across all included measures of sexual behavior, females displayed greater cross-cultural variation than males.

If women demonstrate more cross-cultural

variability in sexuality than men, women's sexuality should also be more affected by institutions of cultural importance and influence. Two of the most powerful social institutions in many cultures are education and religion. Educational attainment and religious involvement are related to greater variability in female sexuality than in male sexuality (Laumann et al. 1994). Highly educated women are on average more sexually permissive than women with less education, but educational attainment is unrelated to men's sexual permissiveness (Wilson 1975). Conversely, church attendance is associated with decreased sexual permissiveness, but again this effect is more pronounced in women than in men (Reiss 1967).

A person's peer group and family provide other source of influence with the potential to affect sexuality. Consistent with the female erotic plasticity hypothesis, the influence of the peer group on sexuality is stronger in women than in men. Whereas peer group approval of premarital sex and sexual activity in general is significantly correlated to sexual activity in females, peer group approval is unrelated to sexual activity in males (Mirande 1968). Women's sexuality is also shaped to a greater extent than male sexuality by variables related to family background, such as mother's attitudes about sex, parents' age, parents' age at their wedding, and parental divorce (Thornton and Camburn 1987).

Beyond the influence of the peer group and family, broader cultural movements and shifts in sexual norms seem to affect women's sexuality more than men's sexuality. Some of the most provocative evidence consistent with the female erotic plasticity hypothesis comes from the so-called sexual revolution of the 1970s. The sexual revolution led to unprecedented changes in women's sexual behavior that extended far beyond the changes observed in men (Birenbaum 1970). Permissiveness toward sex increased much more for women than for men during the sexual revolution (Bauman and Wilson 1974). The political rhetoric of radical feminists even led some women to choose to become lesbians because heterosexuality was devalued as "sleeping with the enemy" (Blumstein and Schwartz 1977). There are no reports of parallel patterns in men, such as changing sexual orientation based on political influence.

A complementary approach to test the female erotic plasticity hypothesis is to consider how biological factors influence male and female sexuality. In studies accounting for both hormonal and social influences of boys' and girls' sexuality, the strongest predictors of sexual activity among girls were social influences, such as the sexual activities of close friends (Udry et al. 1986). Studies of sexual dysfunction in women show that physical signs of sexual response (e.g., arousal, vaginal lubrication, and orgasm) are less predictive of female sexual dysfunction than social factors, including general emotional well-being and the emotional relationship with the partner (Bancroft et al. 2003). Additionally, a recent meta-analysis found that the link between physiological measures of sexual arousal and subjective, self-reported arousal is much higher for men ($r = .66$) than for women ($r = .26$; Chivers et al. 2010).

Attitude-behavior consistency

Attitude-behavior consistency is another concept that provides insight into the degree of erotic plasticity within a population. High erotic plasticity entails that sexual responses may vary considerably with specific circumstances, and so general attitudes will predict behavior only weakly. In contrast, low erotic plasticity indicates a constancy of sexual response independent of changing circumstances, and so general attitudes should predict behavior rather reliably.

Consistent with the notion that women have higher erotic plasticity, women demonstrate lower attitude-behavior consistency than men in reference to sexuality. Over the years, various studies have found higher percentages of women than men who engage in premarital sex despite personally disapproving of premarital sex (e.g., Christensen and Carpenter 1962). Attitude-behavior inconsistency also occurs when people have sex without desiring sex. Both men and women have sex when they lack the desire for it, but this occurs more frequently among women than among men (82% versus 60%; Beck et al. 1991). In a study of committed couples, 50% of women and only 26% of men reported engaging in unwanted sexual activity during a two-week period (O'Sullivan and Allgeier 1998).

The correspondence between partner preferences (i.e., male or female) and actual partner choices is another form of attitude-behavior consistency. The National Health and Social Life Survey assessed attitudes toward homosexuality by asking participants to rate the appeal of same-gender sex. Among people who reported that same-gender sex is appealing, women were much less likely than men to have actually had same-gender sex within the previous year (less than 50% versus 85%; Laumann et al. 1994), indicating greater attitude-behavior inconsistency among women.

Sources of erotic plasticity

Although support for the female erotic plasticity hypothesis is quite strong, including multiple methods and perspectives in fields ranging from psychology and sociology to anthropology, the reasons underlying the gender difference in erotic plasticity remain a topic for speculation. Baumeister (2000) suggested that gender differences in the erotic plasticity may be caused in part by gender differences in sex drive strength.

Sex drive strength is expected to affect erotic plasticity because it is presumably easier to modify a relatively mild drive than a strong drive. Therefore, one possible explanation for female erotic plasticity is that women have on average milder sex drives than men. The concept of *sex drive* is defined as sexual motivation involving the desire for sexual activity and sexual pleasure. Indeed, the question of whether men or women have stronger sex drives has attracted controversy and debate. Acton (1857) famously said that "the majority of women (happily for society) are not very much troubled with sexual feeling of any kind" (p. 163). In sharp contrast, Ehrenreich (1999) asserted that woman, not man, is "the sexual powerhouse of the species" (p. 64).

The debate over which gender deserves claim to the strongest sex drive was undoubtedly prolonged by the methodological difficulties of measuring sex drive. There are no optimal methods for measuring sex drive; instead, multiple measures are necessary. People who are motivated to pursue sexual satisfaction due to their high sex drive should show a number of cognitive, emotional, and behavioral manifestations. Behavioral manifestations of high sex drive could include number of sex partners, frequency of masturbation, frequency of sexual fantasies or thinking about sex, number of desired partners, or tradeoffs willingly taken to obtain sex.

In an extensive review of the sexuality literature, Baumeister, Catanese, and Vohs (2001) concluded that men have a higher sex drive than women. Across the literature reviewed, men scored higher than women on all measures of sex drive, including but not limited to, sexual thoughts, sexual fantasies, spontaneous sexual arousal, desired frequency of sex, and masturbation.

Although women have a lower sex drive than men on average, it is still unclear whether lower sex drive contributes to erotic plasticity. To test whether sex drive strength is related to erotic plasticity, it would be beneficial to test how individual variations in sex drive within each gender predict erotic plasticity. If low sex drive is associated with higher levels of erotic plasticity, then men with a relatively low sex drive should display as much erotic plasticity as women with a relatively low sex drive. Almost no research has tested how within-gender differences in sex drive affect erotic plasticity. Data collected from the BBC Internet Survey, however, provided some relevant evidence. Lippa (2006) reported that high sex drive in men correlates to more sexual interest in either men or women, depending on the sexual orientation of the man surveyed. In women, however, high sex drive correlates to more sexual interest in both men and women. The implication of these studies is that women's low sex drive alone may not explain female erotic plasticity. The greater erotic plasticity observed in women cannot be attributed solely to women's lower sex drive because even women with a high sex drive show higher levels of erotic plasticity than men.

Neuroscience methods may be particularly helpful in unraveling the causes of erotic plasticity. To our knowledge, there are no data suggesting how erotic plasticity is tied to brain functioning. Is erotic plasticity related to neural plasticity? Is it possible that females have a weaker signal from the brain stem, which could then allow the cortex more latitude to interpret information related to sexuality? Speculation about the causes of female erotic plasticity leaves more questions than answers, and we expect that a neuroscience investigation of the causes of erotic plasticity could make valuable contributions to sexology.

Intimacy and passion

Gender differences in erotic plasticity demonstrate that the sex drive may change more for women over the course of life than for men. Although female sexuality appears to have a greater potential to fluctuate throughout life, the passage of time undoubtedly affects

the sex drive of both men and women. As people enter adulthood, the initiation of intimate romantic relationships becomes increasingly important. A complete view of human sexuality must address how romantic relationships affect sexual motivation. Sexual motivation and long-term sexual satisfaction are theorized to be closely related to the development of intimacy in romantic relationships. Indeed, examining the relationship between intimacy and passion in romantic relationships offers another perspective for understanding how the sex drive fluctuates across time in both genders.

How are intimacy and passion related? Baumeister and Bratslavsky (1999) proposed that passion is a function of changes in the level of intimacy (i.e., the first derivative of intimacy over time). This formulation indicates that passion will be felt most strongly during times when intimacy is rising rapidly. When intimacy is stable, regardless of whether it is high or low, passion will be relatively low.

By way of definition, we consider intimacy as a condition of a relationship that consists of three components: informational closeness, emotional closeness, and communication of affection. That is, intimacy entails mutual disclosure of personal information, a strong favorable attitude toward the other person in the relationship, and the communication of verbal or physical affection intended to convey caring to the other person.

Unlike intimacy, which can be considered a condition that either exists or does not exist within a relationship, passion is a subjective feeling state. Passionate love involves exceptionally strong feelings of attraction toward another person that are accompanied by physiological arousal and the desire to be with the other person. Berscheid (1983) considered passionate love an emotion, and therefore predicted that passionate love would abide by the psychological properties characteristic of other emotions, such as following a particular time course.

The time course of passion should be different than the time course of intimacy because passion is an emotion and intimacy is a relationship condition. Whereas the development of intimacy is often incremental and spread over time, passion is a rapidly felt, yet ultimately fleeting emotion. Baumeister and Bratslavsky (1999) derived their theory that passion is a function of changes in intimacy by noting that emotions, such as passionate love, respond to situational changes. Although other factors may also contribute to passion, their review suggests that future research should continue to test the idea that changes in intimacy may play an important role in the development of passion.

The difficulty of operationalizing passion is a barrier to testing whether passion is a function of changes in intimacy. Although the term passion does not refer exclusively to sexual desire and activity, sexual desire is often noted as an important part of passion (see Sternberg 1986). Data collected on romantic relationships have used sexual desire as a crude measure of passionate love. Therefore, one way to test how changes in intimacy affect passion is to test how changes in intimacy predict sexual desire over the course of a relationship.

The initial stages of romantic relationships are characterized not only by rapidly increasing intimacy but also high levels of passion as reflected in the level of sexual desire partners feel for each other. Indeed, there is evidence that gender differences in sex drive become smaller during the beginning of romantic relationships. No gender differences in sex drive were found among young couples who had been in romantic relationships for an average duration of two years (Davies et al. 1999). When people fall in love, sex drive increases for both genders. The increase in sex drive that occurs during passionate love may lead couples to overestimate their sexual compatibility because their sex drives temporarily appear evenly matched (Arndt 2009). When passionate love diminishes, however, men and women return to their baselines of sexual desire, which is on average much lower for women than for men (Baumeister et al. 2001).

Although couples experience large increases in intimacy levels when they begin their relationship, subsequent increases in intimacy are smaller and less frequent simply because there is a limit to how much intimacy is possible in a relationship. The ever-smaller increases in intimacy possible in romantic relationships should lead to less frequent and less intense passion in relationships over time. This is consistent with the finding that the frequency of sex declines over the course of marriage (Udry 1980). Given that remarrying leads to an increase in frequency of sex (Call et al. 1995), age alone is not responsible for the decline in frequency of sex throughout marriage. Indeed, the frequency of intercourse in marriage declines more rapidly in the earlier years of marriage than in the later years of marriage (Ard 1977), consistent with the idea that intimacy rises sharply at first and then levels off.

According to the theoretical model of passion provided by Baumeister and Bratslavsky (1999), two factors are central to determining the amount of passion in a relationship. The first is how quickly intimacy increases within a romantic relationship. The second is how directly changes in intimacy translate into increased passion. There may be individual differences in sensitivity to changes in intimacy, such that some people need larger increases in intimacy to achieve the same level of passion as others.

Baumeister and Bratslavsky (1999) theorized that women require greater changes in intimacy than men to achieve the same level of passion. This proposed gender difference suggests that women may require more intimacy to feel passion, which should make the development of intimacy in a relationship more central to female sexuality than to male sexuality. Findings consistently support the idea that intimacy is more fundamental to arousal in women than in men (e.g., Hatfield et al. 1988). Additionally, the gender difference could create asymmetries in personal disclosures, such that men would be less invested in disclosing personal information because less disclosure is needed to induce passion.

If the gender difference is correct, men may want sex and feel passionate love earlier in a relationship than women because smaller increases in intimacy are needed to produce passion in men. Indeed, men do tend to want sex earlier in a relationship (McCabe 1987)

and to fall in love more quickly than women (Baumeister et al. 1993). The idea that men require relatively smaller increases in intimacy than women to produce passion may also have implications for the frequency of sex throughout a relationship. Indeed, a survey of couples who had been married for at least 20 years found that husbands reported wanting about 50% more sex, whereas wives were satisfied with the frequency of sex (Ard 1977). This pattern is well-replicated considering multiple findings that most marital conflicts about sex involve the husband wanting more frequent sex than the wife (e.g., Kinsey et al. 1948, Kinsey et al. 1953). One reason men want more frequent sex than women may be that men actually feel more passion.

Although several lines of research suggest tentatively that smaller changes in intimacy are sufficient to produce passion in men than in women, little evidence suggests why these differences may exist. Perhaps neuroscience methods could be used to test whether increases in intimacy differentially affect neural processes and brain functioning for women and men. Research addressing how intimacy affects the brain may contribute to an understanding of how intimacy, passion, and sexual functioning are intertwined. Convergent lines of research suggest that activities that are designed to build intimacy, such as marital therapy (O'Leary and Arias 1983) or engaging in novel and exciting activities as a couple (e.g., Aron and Aron 2001) can stimulate passionate love and increase sexual functioning and sexual satisfaction within a relationship. Despite the promise and excitement of these findings, more work is needed to understand precisely how changes in intimacy affect the brain and allow the rise of passion.

The relationship between changes in intimacy and passion has a number of implications for sexual satisfaction in romantic relationships. The high levels of intimacy expected in long-term romantic relationships may make it more difficult to achieve passion because additional increases in intimacy become more difficult to achieve. Additionally, increasing intimacy too quickly in a romantic relationship may decrease the total potential for passion in the relationship because there is probably a limit to how much passion a person can feel at one time. Although a very large increase in intimacy should create intense passion, the increase in intimacy is effectively wasted if it creates a level of passion that extends beyond a person's maximum threshold for feeling passion. The relationship between changes in intimacy and feelings of passion provides one theoretical perspective demonstrating how sexual motivation changes throughout romantic relationships. An even more basic question is how sexual motivation shapes the initiation of sexual relationships.

Sexual economics

Sexual motivation should be related to increased efforts to obtain opportunities to have sex. The greater male (than female) sex drive has implications for the initiation and negotiation of sexual relationships.

Social exchange theories of sexuality analyze

sexual behavior through economic principles. These theories suggest that the relative costs and benefits of social behaviors will determine which behaviors become common (e.g., Homans 1961, Sprecher 1988). Although social exchange theories of sexuality are not new arrivals to the sexology literature, Baumeister and Vohs (2004) proposed that previous analyses had overlooked the idea that sex operates as a female resource. In other words, female sexuality has exchange value and male sexuality does not. The superior exchange value of female sexuality derives from the "principle of least interest" (Waller and Hill 1938/1951), which asserts that the party who is less invested in the outcome of an exchange has more power to shape the exchange.

Sex is a female resource, therefore, because women on average have a lower sex drive than men and therefore desire sex less than men (Baumeister et al. 2001). In market terms, women are the sellers of sex, and men are the buyers of sex. This does not imply that women literally sell sex to men, though of course that does sometimes happen. Instead, women hold a privileged position in the negotiation of sex due to the principle of least interest. If women and men had the same desire for sex and therefore placed the same value on sex, then the sex act itself would be an even exchange. But because women desire sex less than men, men must offer women additional benefits beyond the sex act itself to make the exchange fair. These additional benefits can include love, commitment, security, attention, and material resources, and the amount of these benefits men must give women to obtain sex constitutes a sort of price of sex.

The price of sex, according to social exchange analyses, is regulated by principles of supply and demand. In the sexual marketplace, men and women have competing interests. Men benefit sexually if the price of sex is low, whereas women benefit economically and emotionally if the price of sex is high. One way women can maintain a high price of sex is by employing the economic principle of scarcity. Restricting the supply of sex increases the price of sex. Individual women could demand higher prices for their sex by refusing to have sex early in a relationship or without serious signs of commitment. Nonetheless, women who raise the price of their sex above the market average could find it difficult to attract potential buyers because men can find other, less expensive options. This illustrates that the price for sex is determined by the overall behavior of buyers and sellers, which is contingent on social norms.

The sex ratio of males to females in a population can exert enormous influence on sexual norms and on the price of sex. As documented in a classic study of the sex ratio by Guttentag and Secord (1983), sexual norms change as a function of which gender is in the majority. In the sexual marketplace, women constitute the supply and men constitute the demand for sex. When men outnumber women, the demand for sex exceeds the supply, and the price of sex rises. This means that sex outside of committed relationships is rare and men must offer women more benefits to obtain sex. In contrast, when women outnumber men the price of sex decreases because supply outstrips demand. A surplus of women compared to men creates sexual norms that

favor casual sex without commitment. Indeed, American college campuses were left with about eight times as many women as men during World War II. This hugely disproportionate sex ratio dramatically altered the social exchange rules of sex. Skirt lengths became shorter (Barber 1999), and social norms were inverted as women were forced to compete for dates (Petersen 1999). The recent shift toward more female than male college students has again contributed to loose sexual norms (Regnerus 2011).

In economic systems, sellers can maintain high prices for their products or services through collusion. In the sexual marketplace, women may work together to restrict the supply of sex as a rational strategy to maintain an appropriately high value of sex. Indeed, considerable evidence suggests that women are motivated to suppress the sexuality of other women by exerting influence on other women to avoid feeling sexual desire and to refrain from sexual activities. In their literature review, Baumeister and Twenge (2002) found that the proximal sources of the suppression of female sexuality were overwhelmingly women. This finding is consistent with social exchange analysis of sexuality in which sex is a female resource. Thus, essentially, the cultural suppression of female sexuality can best be understood as a process by which women pressure each other to restrain their sexuality and make sex less available to men, so that price of sex is high, which benefits women in general.

Individual women who undercut the collective bargaining position of women by "cheap" sexual behavior have often been met by the female community with disapproval, ostracism, and other disincentives. Women are more likely than men to judge promiscuous women harshly (Millhausen and Herold 1999). Women also tend to disfavor any practices that lower the price of sex. Compared to men, women hold more negative attitudes about a variety of sexual behaviors, including premarital sex, extramarital sex, and casual sex (Laumann et al. 1994, Wilson 1975). Pornography and prostitution are no exceptions. These sexual outlets serve as cheap alternatives to sex with women who require commitment and investment, and not surprisingly, women hold more negative attitudes than men toward pornography (Lottes et al. 1993) and prostitution (Klassen et al. 1989).

The evidence that women are the proximal sources responsible for the suppression of female sexuality is relevant to the female erotic plasticity hypothesis. One question is whether the suppression of female sexuality is effective only in restraining unwanted sexual behavior or if it also decreases desire to engage in unwanted sexual behavior. If suppression of female sexuality decreases sexual desire among women, and not just sexual behavior, then suppression of female sexuality provides additional evidence in support of the female erotic plasticity hypothesis. Thus, research on the brain mechanisms responsible for female erotic plasticity would also contribute to understanding the extent to which influence attempts by other people can alter sexual desire in men and women. This has implications not only for the negotiation of sex within the sexual marketplace, but possibly also for treatment of sexual dysfunction or paraphilias.

Conclusion

Our review of several mid-level theories of sexuality indicates that the development and expression of sexuality varies within individuals over time, within relationships, and within sociocultural context. In particular, the research reviewed on erotic plasticity is consistent with the hypothesis that women may experience more intraindividual changes in sexual attitudes, desires, and behaviors over time than men. Within romantic relationships, research reviewed on passion suggests that both genders experience changes in sexuality due to the time course of intimacy. Passion subsides in relationships as increases in intimacy become less frequent and less intense. Regarding the initiation of sexual relationships, changes in the sociocultural context, such as the fluctuating sex ratio and collective female efforts to uphold norms of sexual restraint, affect how sex is negotiated between genders. Although such changes in sexuality are well documented, neuroscience research is needed to shed light on how the brain enables, responds, and adjusts to these changes.

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