

# SHORT-TERM SEXUAL STRATEGIES

## CHAPTER 6

Imagine an attractive person of the opposite sex walking up to you on a college campus and saying “Hi, I’ve been noticing you around town lately, and I find you very attractive. Would you have sex with me?” How would you respond? If you were like 100 percent of the women in one study, you would give an emphatic no. You would be offended, insulted, or just plain puzzled by the request. But if you were like the men in that study, the odds are good that you would say yes—as did 75 percent of those men (Clarke & Hatfield, 1989). As a man you would most likely be flattered by the request. Many of the 25 percent of the men who declined the sexual offer were apologetic, citing previous commitments. A subsequent study found that men report more willingness to accept sexual offers from attractive than unattractive women (not surprising given the importance men place on appearance), whereas women report more willingness to accept sexual offers from men who are high in socioeconomic status and high in attractiveness, if the context involves some level of emotional intimacy rather than just pure sex (Greitemeyer, 2005). The idea that men and women react differently when it comes to casual sex may not be surprising. Theories in evolutionary psychology, however, provide a principled basis for predicting this difference and for explaining its magnitude.

### ■ THEORIES OF MEN'S SHORT-TERM MATING

We begin by considering theories of short-term mating. First, we will look at the adaptive logic of men's short-term mating and why it would loom larger in men's than in women's psychological repertoires. Second, we examine



*[Women] not rarely run away with a favoured lover . . . We thus see that . . . the women are not in quite so abject a state in relation to marriage as has often been supposed. They can tempt the men they prefer, and sometimes can reject those whom they dislike, either before or after marriage.*

—Charles Darwin, 1871

*The biological irony of the double standard is that males could not have been selected for promiscuity if historically females had always denied them opportunity for expression of the trait.*

—Robert Smith, 1984

the potential costs that men might incur from short-term mating. And third, we explore the specific adaptive problems that men must solve if they are to successfully pursue short-term mating.

## Adaptive Benefits for Men of Short-Term Mating

Trivers's (1972) theory of parental investment and sexual selection, described in Chapter 4, provides a powerful basis for expecting sex differences in the pursuit of short-term mating: Men, more than women, are predicted to have evolved a greater desire for casual sex. The same act of sex that causes a woman to invest nine months of internal gestation obligates the man to practically no investment. Over a one-year period, an ancestral man who managed to have short-term sexual encounters with dozens of fertile women would have caused many pregnancies. An ancestral woman who had sex with dozens of men in the course of the same year could produce only a single child (unless she bore twins or triplets). See Box 6.1 for a discussion of function and beneficial effects of short-term mating.

The reproductive benefits for men who successfully pursued a short-term mating strategy would have been direct: an increase in the number of offspring produced. A married man with two children, for example, could increase his reproductive success by a full 50 percent by one short-term copulation that resulted in conception and birth. This benefit assumes, of course, that the child produced by such a brief union would have survived, which would have depended in ancestral times on a woman's ability to secure resources through other means (e.g., by herself, through kin, or through other men). Historically, men appear to have achieved increases in reproductive success mainly through increases in the number of sexual partners, not through increases in the number of children per partner (Betzig, 1986; Dawkins, 1986). This chapter will document the evidence for this claim, focusing on the evolved psychology of men's desire for a variety of partners.

## Potential Costs of Short-Term Mating for Men

Short-term sexual strategies, however, carry potential costs for men. Over evolutionary time men risked (1) contracting sexually transmitted diseases, a risk that increases with the number of sex partners; (2) acquiring a social reputation as a "womanizer," which could impair their chances of finding a desirable long-term mate; (3) lowering the chances that their children would survive owing to lack of paternal investment and protection; (4) suffering violence at the hands of jealous husbands or mates if the women with whom they pursued this strategy were married or mated; (5) suffering violence at the hands of the father or brothers of the women; and (6) risking retaliatory affairs by their wives and the potential for a costly divorce (Buss & Schmitt, 1993; Daly & Wilson, 1988; Freeman, 1983).

Given the large potential adaptive advantages of short-term mating for men, selection might have favored a short-term mating strategy despite these costs. We would expect selection to have favored psychological mechanisms in men that were sensitive to these costs and hence acted to reduce them when possible or preferentially pursue a short-term mating strategy only when the costs were low or could be circumvented. Pursuing a short-term mating strategy thus involves solving a number of specific adaptive problems, to which we now turn.

**BOX 6.1**

## Functions versus Beneficial Effects of Short-Term Mating

Short-term mating may have beneficial effects that are different from the original function. For example, “securing a part as an actor or actress in a movie” may be a beneficial effect of short-term mating, but could not have been an original function of such mating. Motion pictures are a modern invention and are not part of the selective environment in which humans evolved. Of course, this does not preclude “exchange sex for position or privilege” as a more abstract function of short-term mating.

For a benefit to qualify as a function of short-term mating means (1) that there was recurrent selection pressure over human evolutionary history such that (2) the benefit was recurrently reaped by those who engaged in short-term mating under some conditions; (3) that the costs in fitness currencies of pursuing short-term mating were less than the benefits in the contexts in which they were pursued; and (4) that selection favored the evolution of at least one psychological mechanism specifically designed to promote short-term mating in specific circumstances.

Because we cannot go back in time, we must use various standards of evidence for inferring the evolution of psychological mechanisms specifically designed to promote short-term mating. Among the criteria we can adopt are: (1) Do people in most or all cultures engage in short-term mating under particular conditions when not physically constrained from doing so? (2) Are there specific contexts that predispose men and women to engage in short-term mating that would imply the existence of psychological mechanisms sensitive to those contexts?

(3) On the basis of our knowledge of ancestral environments, is it reasonable to infer that those specific contexts would have provided recurrent opportunities for women to engage in short-term mating? (4) Was a potential benefit likely to be received by a woman or a man engaging in short-term mating in those contexts? (5) Was the benefit sufficiently large to outweigh the potential costs of short-term mating? (6) Are the contexts in which women and men currently engage in short-term mating analogous to ancestral conditions in which the costs were likely to be minimized and the benefits maximized?

The empirical work conducted so far cannot address all of these questions and hence cannot unambiguously distinguish those benefits that may be actual functions of short-term mating from those that are merely side effects. Nonetheless, the available empirical evidence does provide a guide to those that are reasonably good and bad candidates for function. Given the prevalence of short-term mating across all known cultures, including tribal cultures such as the Ache (Hill & Hurtado, 1996), the Tiwi (Hart & Pilling, 1960), the !Kung (Shostak, 1981), the Hiwi (Hill & Hurtado, 1989), and the Yanomamö (Chagnon, 1983), the prevalence of infidelity in plays and novels dating back centuries, the evidence for human sperm competition (Baker & Bellis, 1995), and the prevalence of the desire for sexual variety, it is reasonable to infer that ancestral conditions would have permitted recurrent opportunities for women and men to benefit from short-term mating some of the time.

## Adaptive Problems Men Must Solve When Pursuing Short-Term Mating

Ancestral men who pursued a short-term sexual strategy confronted a number of specific adaptive problems—partner number or variety, sexual accessibility, identifying which women were fertile, and avoiding commitment.

***The Problem of Partner Number or Variety.*** Successful pursuit of short-term mating requires an adaptation that is motivational in nature, something that would impel men toward

a variety of sex partners. One first-line solution to the problem of partner number can be expected in desire for sexual access to a large number of women (Symons, 1979). A second specialized adaptation expected on theoretical grounds is a relaxation of standards that men might impose for an acceptable short-term partner. Elevated standards, by definition, preclude a large number of women from exceeding them. This relaxation of standards should apply to a wide range of mate characteristics, including age, intelligence, personality traits, and personal circumstances such as whether the woman is already involved with someone else. A third predicted adaptation is to impose minimum time constraints—that is, to let little time elapse before seeking sexual intercourse.

***The Problem of Sexual Accessibility.*** Advantages would accrue to men who directed their mating efforts most intensely toward women who were sexually accessible. Time, energy, and courtship resources devoted to women who are unlikely to consent to sex would interfere with the successful pursuit of short-term mating. Specialized adaptations for solving the problem of sexual accessibility might occur in the form of men's short-term mate preferences. Women who show signs of being prudish, sexually inexperienced, conservative, or low in sex drive should be disfavored. Clothes signaling sexual openness or behavior signaling promiscuity, which would be highly undesirable in a long-term mate, might be desired by men in short-term mates because they suggest sexual accessibility.

***The Problem of Identifying Which Women Are Fertile.*** A clear evolutionary prediction is that men seeking short-term mates would prefer women who displayed cues correlated with fertility. A maximally fertile woman would have the highest probability of getting pregnant from a single act of sex. In contrast, men seeking long-term mates might be predicted to prefer younger women of higher reproductive value, because such women will be more likely to reproduce in the future (see Chapter 5 for a discussion of the distinction between fertility and reproductive value).

This distinction—fertility versus reproductive value—does not guarantee that selection will have fashioned two different standards of attraction in men, one when they are pursuing casual sex and another when they are pursuing a marriage partner. The key point is that this distinction can be used to generate a hypothesis about shifts in age preferences, which we can then test. Men pursuing short-term mates are predicted to desire fertile women.

***The Problem of Avoiding Commitment.*** Men seeking short-term mates are predicted to avoid women who might demand serious commitments or investments before consenting to sex. The larger the investment in a particular woman, the fewer the number of sexual partners a given man can succeed in attracting. Women who require heavy investment effectively force men into a long-term mating strategy, which obviously conflicts with their pursuit of short-term opportunistic copulations. Men seeking short-term mates, therefore, are predicted to shun women who appear to desire long-term commitments or heavy investments before agreeing to sex.

In summary, on theoretical grounds men's pursuit of a short-term mating strategy would have carried several costs and would have required solving several adaptive problems. If over human evolutionary history men have pursued short-term mating, we should

expect evolved solutions to these problems. For example, men pursuing short-term sex should especially prefer women who show signs of being immediately sexually available, high in fertility, and low in the likelihood of imposing entangling commitments. Let us now turn to the empirical evidence for the underlying psychology of short-term mating.

## ■ EVIDENCE FOR AN EVOLVED SHORT-TERM MATING PSYCHOLOGY

Casual sex typically requires the consent of both sexes. Ancestral men could not have carried out temporary affairs alone. At least some ancestral women must have practiced the behavior some of the time, because if all women historically had mated monogamously for life with a single man and had no premarital sex, the opportunities for casual sex with consenting women would have vanished (Smith, 1984). The exception, of course, would occur in the context of coerced sex—a topic we will explore in Chapter 11.

Short-term mating in the form of affairs, one-night stands, and temporary liaisons occurs in all cultures and is not a new phenomenon. In fact, there are many clues in our existing physiology and psychology that betray a long history of casual sex stretching back to our evolutionary roots. Let's examine the physiological evidence.

### Physiological Evidence for Short-Term Mating

Existing adaptations in our psychology, anatomy, physiology, and behavior reflect the scoring of prior selection pressures. Just as the modern fear of snakes reveals an ancestral hazard, so our sexual anatomy and physiology reveal an ancient story of short-term sexual strategies.

**Testicle Size.** There are a number of physiological clues to the history of multiple matings. One clue comes from the size of men's testicles. Large testes typically evolve as a consequence of intense sperm competition—when the sperm from two or more males occupy the reproductive tract of one female at the same time because she has copulated with two or more males (Short, 1979; Smith, 1984). Sperm competition exerts a selection pressure on males to produce large ejaculates containing numerous sperm. In the race to the valuable egg, the larger, sperm-laden ejaculate has an advantage in displacing the ejaculate of other men inside the woman's reproductive tract.

Men's testes size, relative to their body weight, is far greater than that of gorillas and orangutans. Male testes account for .018 percent of body weight in gorillas and .048 percent in orangutans (Short, 1979; Smith, 1984). In contrast, human male testes account for .079 percent of men's body weight, or 60 percent more than that of orangutans and more than four times that of gorillas, corrected for body size. Men's relatively large testes provide one piece of evidence that women in human evolutionary history sometimes had sex with more than one man within a time span of a few days. This size of testes would have been unlikely to have evolved unless there was sperm competition. And it suggests that both sexes pursued short-term mating some of the time. But humans do not possess the largest testes of all the primates. Human testicular volume is substantially smaller than that of the highly promiscuous chimpanzee, whose testes account for .269 percent of its body weight, more

than three times more than the percentage for men. These findings suggest that our human ancestors rarely reached the chimpanzee's extreme of relatively indiscriminate sex.

To get a concrete feel for the differences in sexuality between chimps and humans, Wrangham (1993) summarized data from a variety of studies on the estimated number of male copulation partners that females from a variety of primate species experienced per birth. The highly monogamous gorilla females averaged only one male sex partner per birth. Human females were estimated to have 1.1 male sex partners per birth, or nearly 10 percent more sex partners than gorillas. In contrast, baboon females had eight male sex partners per birth; bonobo chimp females had nine male sex partners per birth; and common chimpanzee females (*Pan troglodytes*) had thirteen male sex partners per birth. Thus, the behavior that leads to sperm competition—females having sex with a variety of males—appears to accord well with the evidence on sperm volume. Humans show higher levels of sperm competition than the monogamous gorillas but far lower levels of sperm competition than the more promiscuous chimps and bonobos.

**Variations in Sperm Insemination.** Another clue to the evolutionary existence of casual mating comes from variations in sperm production and insemination (Baker & Bellis, 1995). In a study to determine the effect on sperm production of separating mates from each other, thirty-five couples agreed to provide ejaculates resulting from sexual intercourse, from either condoms or flowback, the gelatinous mass of seminal fluid that is spontaneously discharged by a woman at various points after intercourse. The partners in each couple had been separated for varying intervals of time.

Men's sperm count went up dramatically with the increasing amount of time the couple had been apart since their last sexual encounter. The more time spent apart, the more sperm the husbands inseminated in their wives when they finally did have sex. When the couples spent 100 percent of their time together, men inseminated 389 million sperm per ejaculate, on average. But when the couples spent only 5 percent of their time together, men inseminated 712 million sperm per ejaculate, almost double the amount. The number of sperm inseminated increases when other men's sperm might be inside the wife's reproductive tract at the same time as a consequence of the opportunity provided for extramarital sex by the couple's separation. The increase in sperm insemination upon being reunited did not depend on the time since the man's last ejaculation. Even when the man had masturbated to orgasm while away from his wife, he still inseminated more sperm on being reunited if he had been away from her a long time.

The increase in sperm inseminated by the husband after prolonged separation ensures that his sperm will stand a greater chance in the race to the egg by crowding out or displacing a possible interloper's sperm. The fact that men carry a physiological mechanism that elevates sperm count when their wives may have had opportunities to be unfaithful points to an evolutionary history in which humans had extramarital affairs at least some of the time.

## Psychological Evidence for Short-Term Mating

In this section we consider the *psychological* evidence for short-term mating—the desire for sexual variety, the amount of time that elapses before a person seeks sexual intercourse, the lowering of standards in short-term mating, the nature and frequency of sexual fantasies, and the “closing time phenomenon.”



**FIGURE 6.1 Number of Sexual Partners Desired.** Subjects recorded in blank spaces provided how many sexual partners they would ideally like to have for each specified time interval.

Source: Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204–232. Copyright © 1993 by the American Psychological Association. Reprinted with permission.

**Desire for a Variety of Sex Partners.** The primary reproductive benefit of casual sex to ancestral men would have been a direct increase in the number of offspring, so that men faced a key adaptive problem of gaining sexual access to a variety of women. As a solution to this adaptive problem men have evolved a number of psychological mechanisms that have caused them to seek a variety of sexual partners (Symons, 1979).

One psychological solution to the problem of securing sexual access to a variety of partners is *lust*: men have evolved a powerful desire for sex. Men do not always act on this desire, but it is a motivating force: “Even if only one impulse in a thousand is consummated, the function of lust nonetheless is to motivate sexual intercourse” (Symons, 1979, p. 207).

To find out how many sexual partners people in fact desire, researchers asked unmarried U.S. college students to identify how many sex partners they would ideally like to have within various time periods, ranging from the following month to their entire lives (Buss & Schmitt, 1993). The results are shown in Figure 6.1 and show that men desire more sex partners than women at each of the different time intervals. Within the next year, for example, men stated on average that ideally they would like to have more than six sex partners, whereas women said that they would like to have only one. Within the next three years, men desired ten sex partners, whereas women wanted only two. The differences

between men and women in ideal number desired of sex partners increase with time. On average men would like to have eighteen sex partners over their lifetime, whereas women would like only four or five.

Another study analyzed forty-eight “private wishes” ranging from “to be with God when I die” to “to make a lasting contribution through creative work” (Ehrlichman & Eichenstein, 1992). The largest sex difference by far was found for one wish: “to have sex with anyone I choose.” In another study that asked 676 men and women to estimate the frequency with which they experienced sexual desire, the average man estimated thirty-seven times per week, whereas the average woman estimated nine times per week (Regan & Atkins, 2006).

And in a massive cross-cultural study of 16,288 people from ten major world regions, including six continents, thirteen islands, twenty-seven languages, and fifty-two nations, the men expressed a desire for a larger number of sex partners than women did in all cases (Schmitt et al., 2003). From the small island of Fiji to the large island of Taiwan, from the north of Scandinavia to the south of Africa, in every island, continent, and culture, men expressed a substantially greater desire than did women for a variety of different sex partners.

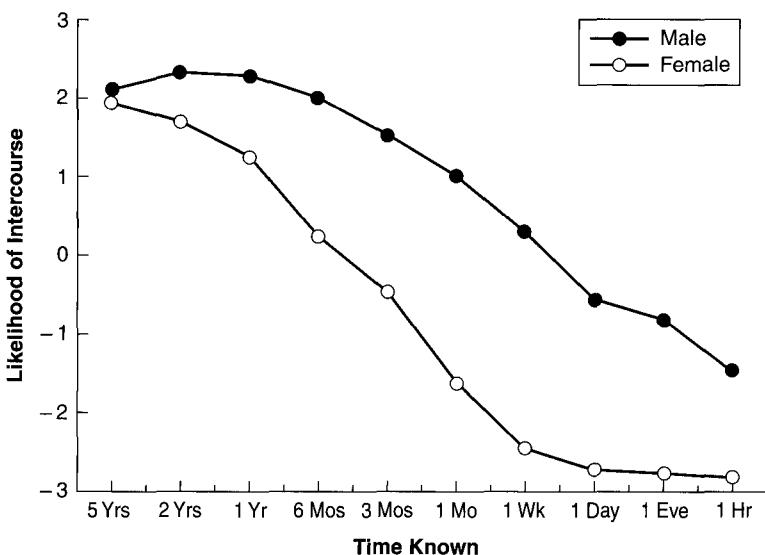
***Time Elapsed before Seeking Intercourse.*** Another psychological solution to the problem of gaining sexual access to a variety of partners is to let little time elapse between meeting the desired female and seeking sexual intercourse. College men and women rated how likely they would be to consent to sex with someone they viewed as desirable if they had known the person for only an hour, a day, a week, a month, six months, a year, two years, or five years (Buss & Schmitt, 1993). Both men and women say that they would probably have sex after knowing a desirable potential mate for five years (see Figure 6.2). At every shorter interval, however, men exceeded women in the reported likelihood of having sex.

Having known a potential mate for only one week, men are still on average positive about the possibility of consenting to sex. Women, in sharp contrast, are highly unlikely to have sex after knowing someone for just a week. Upon knowing a potential mate for merely one hour, men are slightly disinclined to consider having sex, but the disinclination is not strong. For most women, sex after just one hour is a virtual impossibility.

As with their desires, men’s inclination to let little time elapse before seeking sexual intercourse offers a partial solution to the adaptive problem of gaining sexual access to a variety of partners. Men’s greater likelihood of consenting to sexual intercourse after little time has elapsed has now been extensively replicated in samples of varying ages and geographical locations within the United States (Schmitt, Shackelford, & Buss, 2001).

Evolutionary psychologists Michele Surbey and Colette Conohan found similar results when they explored “willingness to engage in casual sex” across a variety of conditions, such as a partner’s level of physical attractiveness, personality, and behavioral characteristics (Surbey & Conohan, 2000). They concluded that “men reported a greater anticipated willingness to engage in sexual intercourse across all conditions compared with women” (p. 367), suggesting that men lower their standards for casual sex. Furthermore, in five laboratory experiments, targets who displayed cues to “easy sexual access” were judged to be far more desirable by men than by women but only in the context of short-term mating (Schmitt, Couden, & Baker, 2001).

***The Lowering of Standards in Short-Term Mating.*** Yet another psychological solution to securing a variety of casual sex partners is a relaxation of standards imposed by men



**FIGURE 6.2 Probability of Consenting to Sexual Intercourse.** Subjects rated the probability that they would consent to sexual intercourse after having known an attractive member of the opposite sex for each of a specified set of time intervals.

*Source:* Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review, 100*, 204–232. Copyright © 1993 by the American Psychological Association. Reprinted with permission.

for acceptable partners. High standards for attributes such as age, intelligence, personality, and marital status function to exclude the majority of potential mates from consideration. Relaxed standards ensure more eligible players.

College students provided information about the minimum and maximum acceptable ages of a partner for temporary and permanent sexual relationships (Buss & Schmitt, 1993). College men accept an age range roughly four years wider than do women for a temporary liaison. Men at this age are willing to mate in the short run with members of the opposite sex who are as young as sixteen and as old as twenty-eight, whereas women prefer men who are at least eighteen but no older than twenty-six. This relaxation of age restrictions by men does not apply to committed mating, for which the minimum age is seventeen and the maximum is twenty-five.

Men relax their standards for a wide variety of characteristics besides age. Men in the study expressed significantly lower standards than the women on forty-one of the sixty-seven characteristics named as potentially desirable in a casual mate. For brief encounters men require a lower level of such assets as charming, athletic, educated, generous, honest, independent, kind, intellectual, loyal, having a sense of humor, sociable, wealthy, responsible, spontaneous, cooperative, and emotionally stable. Men thus relax their standards

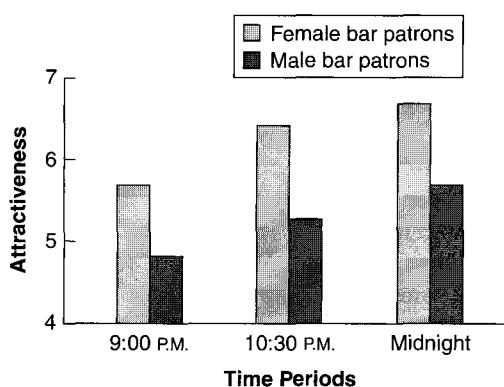
across a range of attributes, which helps to solve the problem of gaining access to a variety of sex partners.

The relaxation of standards, however, does not mean that men have none. Indeed, the standards that men set for sexual affairs reveal a precise strategy to gain sexual access to a variety of partners. Compared with their long-term preferences, for casual sex partners men dislike women who are prudish, conservative, or have low sex drives. Also in contrast to their long-term preferences, men value sexual experience in a potential temporary sex partner, which reflects a belief that sexually experienced women are more sexually accessible to them than women who are sexually inexperienced. Promiscuity, high sex drive, and sexual experience in a woman probably signal an increased likelihood that a man can gain sexual access for the short run. Prudishness and low sex drive, in contrast, signal difficulty in gaining sexual access and thus interfere with men's short-term sexual strategy.

***Minimizing Commitment after Sex.*** Evolutionary psychologist Martie Haselton found evidence for a possible adaptation in men to facilitate the success of a short-term mating strategy: an emotional shift right after sexual intercourse (Haselton & Buss, 2001). Men with more sex partners experienced a sharp decline in how sexually attractive they found their partner immediately following intercourse, whereas neither women nor men with less sexual experience showed this decline. One woman described her experiences in this way: "He is most passionate and all over me just as we meet; after we have sex he is content and doesn't seem to miss me that much any more." This work on the attraction-reduction effect supports the hypothesis that men have yet another psychological adaptation designed to promote the success of a casual sexual strategy, one that motivates either a hasty postcopulatory departure to minimize investment in any one woman or, alternatively, a roving eye within the context of an existing long-term mateship.

***The Closing Time Phenomenon.*** A related psychological clue to men's strategy of casual sex comes from studies that examine shifts in judgments of attractiveness over the course of an evening at singles bars (Gladue & Delaney, 1990; Nida & Koon, 1983; Pennebaker, Dyer, Caulkins, Litowixz, Ackerman, & Anderson, 1979). In one study, 137 men and 80 women in a bar were approached at 9:00 P.M., 10:30 P.M., and 12:00 A.M. and asked to rate the attractiveness of members of the opposite sex in the bar using a ten-point scale (Gladue & Delaney, 1990). As closing time approached, men viewed women as increasingly attractive. The average judgment at 9:00 was 5.5, but by midnight it had increased to over 6.5. Women's judgments of men's attractiveness also increased over time, but women perceived the male bar patrons as less attractive overall compared with the men's perceptions of the women. Women rated the men at the bar as just below the average of 5.0 at 9:00, increasing near the midnight closing time to only 5.5 (see Figure 6.3).

Men's shift in perceptions of attractiveness near closing time occurs regardless of how much alcohol they have consumed. Whether a man consumed a single drink or six drinks had no effect on the shift in viewing women as more attractive. The often noted "beer goggles" phenomenon, whereby women are presumed to be viewed as more attractive with men's increasing intoxication, may instead be attributable to a psychological mechanism that is sensitive to decreasing opportunities over the course of the evening for casual sex. As the evening progresses and a man has not yet been successful in picking up a woman, he views the remaining women in the bar as increasingly attractive, a shift that



**FIGURE 6.3 The Closing Time Phenomenon.** As closing time approaches, both sexes, but especially men, find members of the opposite sex more attractive; the effect occurs even after controlling for the number of alcoholic drinks consumed. Female bar patrons were rated by men, and male bar patrons were rated by women.

Source: Gladue, B. A., & Delaney, J. J. (1990). Gender differences in perception of attractiveness of men and women in bars. *Personality and Social Psychology Bulletin, 16*, 378–391. Copyright © 1990 by Sage Publications, Inc. Reprinted by permission of Sage Publications, Inc.

will presumably increase his attempts to solicit sex from those women. The closing time phenomenon appears to represent a psychological solution to the problem of sexual accessibility—a context-specific lowering of standards as the likelihood of sexual accessibility starts to drop.

**Sex Differences in Sexual Fantasies.** Sexual fantasies provide another psychological clue to an evolutionary history of men's proclivity to casual mating. Fantasies reveal the nature of desires that motivate men's and women's behaviors. Studies document large differences between male and female sexual fantasies. Research conducted in Japan, Great Britain, and the United States showed that men have roughly twice as many sexual fantasies as women (Ellis & Symons, 1990; Wilson, 1987). When asleep, men are more likely than women to dream about sexual events. Men's sexual fantasies more often include strangers, multiple partners, or anonymous partners. During a single fantasy episode, for example, most men report that they sometimes change sexual partners, whereas most women report that they rarely change sexual partners. Forty-three percent of women but only 12 percent of men report that they never substitute or switch sexual partners during a fantasy episode. Thirty-two percent of men but only 8 percent of women report having imagined sexual encounters with more than 1,000 different partners in their lifetime. Men are also more than four times as likely as women to have fantasies about group sex (Wilson, 1997). And 78 percent of men versus 32 percent of women answered "yes" to the question: "Would you ever engage in a threesome sexual situation?" (Hughes, Harrison, & Gallup, 2004). A sample

male fantasy is “being the mayor of a small town filled with nude girls from 20 to 24. I like to take walks, and pick out the best-looking one that day, and she engages in intercourse with me. All the women have sex with me any time I want” (Barclay, 1973, p. 209). Numbers and novelty are key ingredients of men’s fantasy lives.

As evolutionary psychologists Bruce Ellis and Donald Symons observed, “The most striking feature of [male fantasy] is that sex is sheer lust and physical gratification, devoid of encumbering relationships, emotional elaboration, complicated plot lines, flirtation, courtship, and extended foreplay” (Ellis & Symons, 1990, p. 544). These fantasies reveal a psychology attuned to sexual access to a variety of partners.

Women’s sexual fantasies, in contrast, often contain familiar partners. Fifty-nine percent of American women but only 28 percent of American men report that their sexual fantasies typically focus on someone with whom they are already romantically and sexually involved. Emotions and personality are crucial for women. Forty-one percent of the women but only 16 percent of the men report that they focus most heavily on the personal and emotional characteristics of the fantasized partner. As one woman observed: “I usually think about the guy I am with. Sometimes I realize that the feelings will overwhelm me, envelop me, sweep me away” (Barclay, 1973, p. 211). Women tend to emphasize tenderness, romance, and personal involvement in their sexual fantasies.

***Sexual Regret.*** Another potential design feature of men’s short-term sexual psychology centers on feelings of regret. Regret—feelings of sorrow about something in the past—is hypothesized to function to improve future decision making by motivating people to avoid prior mistakes (Poore, Haselton, von Hippel, & Buss, 2005). Sexual regret could operate over two classes of actions—missed sexual opportunities (sexual omission) or sexual actions taken (sexual commission). Two independent groups of researchers have documented that men more than women regret missed sexual opportunities (Poore et al., 2005; Roese, Pennington, Coleman, Janicki, Li, & Kenrick, 2006). One study presented men and women with descriptions of regret such as “Should have tried harder to sleep with \_\_\_\_\_,” “Kicked myself for missing out on a chance to have sex with \_\_\_\_\_” (Roese et al., 2006). Men regretted acts of sexual omission—failures to act on sexual opportunities—significantly more than did women. Women were more likely to have regretted action of sexual commission—wishing that they had not had sex with someone that they did have sex with (Poore et al., 2005). Another study examined whether men and women experienced terrible feelings after “hooking up” (varying forms of casual sexual behavior) (Lambert, Kahn, & Apple, 2003). A total of 46 percent of the men reported experiencing terrible feelings. The two key sources of terrible feelings were (1) that the women that they hooked up with wanted a relationship and (2) overconsumption of alcohol or drugs. Sexual regret, in short, has the hallmarks of an evolved feature in men designed to facilitate acting on future sexual opportunities and avoid entangling commitments.

## Behavioral Evidence of Short-Term Mating

Physiological and psychological evidence both point strongly to a long evolutionary history in which men sought short-term mating with a variety of women. In this section we complete the picture by presenting behavioral evidence that men across cultures actually pursue short-term mating more than women do.

**Extramarital Affairs.** Men in most cultures pursue extramarital sex more often than do their wives. The Kinsey study, for example, estimated that 50 percent of men had extramarital affairs, whereas only 26 percent of women had them (Kinsey et al., 1948; Kinsey, Pomeroy, & Martin, 1953). Anthropologist Thomas Gregor described the sexual feelings of Amazonian Mehinaku men in this way: “Women’s sexual attractiveness varies from ‘flavorless’ (mana) to the ‘delicious’ (awirintya) . . .” (1985, p. 84). Furthermore, Gregor notes that “sad to say, sex with spouses is said to be mana, in contrast with sex with lovers, which is nearly always awirintyapa” (Gregor, 1985, p. 72). Kinsey summed it up best: “There seems to be no question but that the human male would be promiscuous in his choice of sexual partners throughout the whole of his life if there were no social restrictions. . . . The human female is much less interested in a variety of partners” (Kinsey, Pomeroy, & Martin, 1948, p. 589).

**Prostitution.** Prostitution, the relatively indiscriminate exchange of sexual services for economic profit, is another reflection of men’s greater desire for casual sex (Symons, 1979). Prostitution occurs in every society that has been thoroughly studied, from the Azande in Africa to the Zuni in North America (Burley & Symanski, 1981). Within the United States estimates of the number of active prostitutes range from 100,000 to 500,000. Tokyo has more than 130,000 prostitutes, Poland 230,000, and Addis Ababa in Ethiopia 80,000. In Germany there are 50,000 legally registered prostitutes and triple that number working illegally. In all cultures men are overwhelmingly the consumers. Kinsey found that 69 percent of American men had solicited a prostitute and for 15 percent prostitution was a regular sexual outlet. The corresponding numbers for women were so low that they were not even reported as a percentage of the sexual outlet of women (Kinsey et al., 1948, 1953).

Physiological, psychological, and behavioral evidence all point to a long evolutionary history in which short-term mating has been part of the human strategic repertoire (see Table 6.1).

## ■ WOMEN’S SHORT-TERM MATING

On this section we turn to women. First, we consider the evidence that women engage in short-term mating and likely have done so over the long course of human evolutionary history. Second, we consider hypotheses about the adaptive benefits ancestral women might have accrued from short-term mating. Third, we examine the costs of short-term mating for women. Finally, we examine the empirical evidence for the various hypotheses that have been advanced to account for women’s short-term mating.

### Evidence for Women’s Short-Term Mating

Evolutionary theories of human mating, as we have seen, have emphasized the tremendous reproductive benefits to men of short-term mating (e.g., Kenrick et al., 1990; Symons, 1979; Trivers, 1972). Over human evolutionary history the reproductive benefits of short-term mating for men would have been large and direct in the form of additional children. Perhaps because of the elegance of parental investment theory and the extensive empirical support for

**TABLE 6.1 Clues to Ancestral Nonmonogamous Mating****Behavioral Clues**

Extramarital affairs in all known cultures  
Prostitution

**Physiological Clues**

Sperm volume  
Variations in sperm insemination

**Psychological Clues**

Desire for sexual variety  
Desire to seek sex sooner  
Lowering of standards  
Minimizing commitment  
Sexual regret at missed opportunities  
Closing time phenomenon  
Sexual fantasies

it, many theorists have overlooked a fundamental fact about short-term mating: Mathematically, the number of short-term matings must be identical, on average, for men and women. Every time a man has a casual sexual encounter with a woman he has never met, the woman is simultaneously having a casual sexual encounter with a man she has never met.

If ancestral women never engaged in short-term mating, men could not have evolved a powerful desire for sexual variety (Smith, 1984). That desire, if matings were consensual rather than forced, required the existence of some willing women some of the time. And if ancestral women willingly and recurrently engaged in short-term mating, it would defy evolutionary logic if there were no benefits to women of doing so. In fact, there are some clues, starting with the physiology of the female orgasm, that ancestral women did engage in short-term mating.

**Orgasm in Women.** The physiology of women's orgasm provides one clue to an evolutionary history of short-term mating. Once it was thought that a woman's orgasm functioned to make her sleepy and keep her reclined, thereby decreasing the likelihood that sperm would flow out and increasing the likelihood she would conceive. But if the function of orgasm were to keep the woman reclined so as to delay flowback, then more sperm would be retained. That is not the case. Rather, there is no link between the timing of the flowback and the number of sperm retained (Baker & Bellis, 1995).

Women discharge roughly 35 percent of sperm within thirty minutes of the time of insemination, averaged across all instances of intercourse. If the woman has an orgasm, however, she retains 70 percent of the sperm, ejecting only 30 percent. This 5 percent difference is not large, but if it occurred repeatedly, in woman after woman, generation after generation, it could add up to a large selection pressure over evolutionary time. Lack of an orgasm leads to the ejection of more sperm. This evidence is consistent with the theory that a woman's orgasm functions to draw the sperm from the vagina into the cervical canal and uterus, increasing the probability of conception.

The number of sperm a woman retains is also linked with whether she is having an affair. Women time their adulterous liaisons in a way that is reproductively detrimental to their husbands. In a nationwide sex survey of 3,679 women in Britain, all women recorded their menstrual cycles as well as the timing of their copulations with their husbands and, if they were having affairs, with their lovers. It turned out that women having affairs appeared to time their copulations, most likely unconsciously, to coincide with the point in their menstrual cycle when they were most likely to be ovulating and hence were most likely to conceive (Baker & Bellis, 1995). Furthermore, women who are having affairs are more likely to be orgasmic with their affair partner than with their regular partner (see Buss, 2003).

***Behavioral Evidence of Extramarital Affairs.*** The behavioral evidence also suggests that women in all but the most restrictive societies sometimes engage in extramarital sexual unions. In the United States, studies yield an affair rate ranging from 20 to 50 percent for married women (Athanasou, Shaver, & Tavris, 1970; Buss, 1994b; Glass & Wright, 1992; Hunt, 1974; Kinsey et al., 1948, 1953). Affairs have also been documented, despite the shroud of secrecy that surrounds them, in dozens of tribal societies including the Ache of Paraguay (Hill & Hurtado, 1996), the Yanomamö of Venezuela (Chagnon, 1983), the Tiwi of Australia (Hart & Pilling, 1960), the !Kung of Botswana (Shostak, 1981), and the Mehinaku of Amazonia (Gregor, 1985). Modern cultural and tribal behavioral evidence, in short, does not suggest that women invariably pursue a monogamous long-term mating strategy all of the time.

## Hypotheses about the Adaptive Benefits to Women of Short-Term Mating

For short-term sexual psychology to evolve in women, there must have been adaptive benefits associated with casual sex in some circumstances. What might those benefits have been? Five classes of benefits have been proposed: resources, genes, mate switching, mate skill acquisition, and mate manipulation (Greiling & Buss, 2000) (Table 6.2). Let's examine these hypothesized benefits and the empirical evidence for them.

***Resource Hypotheses.*** One benefit of short-term mating is resource accrual (Symons, 1979). Women could engage in short-term mating in exchange for meat, goods, or services. In addition, an ancestral woman might have been able to obscure the actual paternity of her offspring through several short-term matings and thus elicit resources from two or more men (Hrdy, 1981). According to this paternity confusion hypothesis, each man might be willing to offer some investment in the woman's children on the chance that they are genetically his own.

Another possible resource is protection (Smith, 1984; Smuts, 1985). Men typically provide protection to their mates and children, including defense against predators and aggressive men. Because a primary mate cannot always be around to defend and protect a woman, she might gain added protection by consorting with another man.

Finally, Smith (1984) proposed the status enhancement hypothesis of short-term mating. A woman might be able to elevate her social standing among her peers or gain access

**TABLE 6.2 Hypothesized Benefits to Women: Short-Term Mating**

| Hypothesis                               | Author                 |
|--|------------------------|
| <b>Resource</b>                          |                        |
| Investment via paternity confusion       | Hrdy (1981)            |
| Immediate economic resources             | Symons (1979)          |
| Protection through “special friendships” | Smuts (1985)           |
| Status elevation                         | Smith (1984)           |
| <b>Genetic</b>                           |                        |
| Better or “sexy son” genes               | Fisher (1958)          |
| Diverse genes                            | Smith (1984)           |
| <b>Mate Switching</b>                    |                        |
| Mate expulsion                           | Greiling & Buss (2000) |
| Mate replacement                         | Symons (1979)          |
| Mate insurance [backup]                  | Smith (1984)           |
| <b>Short-Term for Long-Term Goal</b>     |                        |
| Sex to evaluate long-term mate potential | Buss & Schmitt (1993)  |
| Clarifying mate preferences              | Greiling & Buss (2000) |
| Honing skills of mate attraction         | Miller (1991)          |
| <b>Mate Manipulation</b>                 |                        |
| Increasing commitment of long-term mate  | Greiling (1995)        |
| Revenge as deterrence                    | Symons (1979)          |

*Source:* Greiling, H., & Buss, D. M. (2000). Women's sexual strategies: The hidden dimension of short-term extra-pair mating. *Personality and Individual Differences*, 28, 929–963.

to a higher social circle by a temporary liaison with a high-status man. Clearly women might gain a variety of tangible and intangible resources through short-term mating.

**Genetic Benefit Hypotheses.** Another class of benefits can be called genetic benefits. The first is the most obvious—*enhanced fertility*. If a woman's regular mate is infertile or impotent, a short-term mate might provide a fertility backup to aid in conception.

Second, a short-term mate might provide *superior genes* compared with a woman's regular mate, especially if she has an affair with a high-status man. These genes might give her offspring better chances for survival or reproduction. One version of this is known as the sexy son hypothesis (Fisher, 1958). By mating with an especially attractive man, a woman might be able to bear a son who is especially attractive to women in the next generation. Her son thus has increased sexual access, produces more children, and hence provides his mother with additional grandchildren.

Third, a short-term mate might provide a woman with *different genes* compared with those of her regular mate, thus enhancing the genetic diversity of her children—perhaps a hedge against environmental change (Smith, 1984).

**Mate Switching Hypotheses.** A third class of benefits pertains to mate switching. Sometimes a woman's husband stops bringing in resources, starts abusing her or her children, or otherwise declines in his value to her as a mate (Betzig, 1989; Fisher, 1992; Smith, 1984). Ancestral women might have benefited from short-term mating to cope with this adaptive problem.

There are several variants of this hypothesis. According to the mate expulsion hypothesis, having a short-term affair would help the woman to get rid of her long-term mate. Because men in many cultures often divorce wives who have affairs (Betzig, 1989), having an affair would be an effective means for the woman to initiate a breakup. Another variant of this hypothesis suggests that a woman might simply find a man who is far better than her husband, and so initiate a short-term encounter as a means of switching mates.

**Short-Term for Long-Term Goals.** Another hypothesis is that women use short-term mating as a means to assess and evaluate prospective long-term mates (Buss & Schmitt, 1993). Engaging in short-term mating allows a woman to clarify the qualities she desires in a long-term mate, evaluate her compatibility with a particular man (e.g., sexual compatibility), and reveal any hidden costs he might carry (e.g., existing children, deception). Two clear predictions follow from this hypothesis: Women will dislike in a short-term mate (1) any signals that the man is already in an existing relationship, because this would lower the odds of her successfully attracting him as a long-term mate, and (2) the attribute of promiscuity, since this would signal that he is pursuing a truly short-term rather than long-term mating strategy. Other variants of the short-term for long-term goals hypothesis are that women use short-term mating to clarify the qualities she truly desires in a long-term mate (Greiling & Buss, 2000) or to hone her skills of attraction and seduction so that she can eventually attract a more desirable long-term mate (Miller, 1991).

**Mate Manipulation Hypotheses.** A fifth class of benefits involves manipulating her mate. By having an affair, a woman might be able to gain revenge on her husband for his infidelity, thus possibly deterring him from future infidelities (Symons, 1979). Alternatively, a woman might be able to increase the commitment of her regular mate if he saw with stark evidence that other men were seriously interested in her (Greiling & Buss, 2000).

## Costs to Women of Short-Term Mating

Women sometimes incur more severe costs than men as a consequence of short-term mating. Women risk impairing their desirability as a long-term mate if they develop reputations for promiscuousness, because men prize fidelity in potential wives. Women known to be promiscuous suffer reputational damage even in relatively promiscuous cultures, such as among the Swedes and the Ache Indians.

Lacking a long-term mate to offer physical protection, a woman who adopts an exclusively short-term sexual strategy is at greater risk of physical and sexual abuse. Although women in marriages are also subjected to battering and even rape from their husbands, the alarming statistics on the incidence of date rape, which run as high as 15 percent in studies of college women, support the contention that women not in long-term relationships are also at considerable risk (Muehlenhard & Linton, 1987). The fact that women participating in the study of short-term and long-term partners abhor lovers who are physically

abusive, violent, and mentally abusive suggests that women may be aware of the risks of abuse (Buss & Schmitt, 1993). Mate preferences, if judiciously applied to avoid potentially dangerous men, can minimize these risks.

The unmarried woman in the pursuit of casual sex risks getting pregnant and bearing children without the benefit of an investing man. In ancestral times such children would likely have been at much greater risk of disease, injury, and death. Some women commit infanticide without the presence of an investing man. In Canada, for example, single women delivered only 12 percent of the babies born between 1977 and 1983 but committed just over 50 percent of the sixty-four maternal infanticides (Daly & Wilson, 1988). The higher infanticide rates among unmarried women occurs across cultures as well, such as among the Baganda of Africa. But even infanticide does not cancel the substantial costs of nine months of gestation, reputational damage, and lost mating opportunities that women incur.

An unfaithful married woman risks the withdrawal of resources by her husband. From a reproductive standpoint she may be wasting valuable time in an extramarital liaison. Furthermore, she risks the possibility of increasing the sibling competition among her children, who may have weaker ties with each other because they were fathered by different men. Finally, women risk contracting sexually transmitted diseases from short-term mating—a risk that is greater for women than for men per act of sex (Symons, 1993).

Short-term mating thus imposes hazards for both sexes. But because there might be large benefits as well, women and men may have evolved psychological mechanisms to select contexts in which costs are minimized and benefits maximized.

## Empirical Tests of Hypothesized Benefits to Women

Despite the abundance of hypothesized benefits to women of short-term mating, the hypotheses have been subjected to relatively few empirical tests. Several researchers have discovered that the woman who is engaged in short-term mating places a premium on the man's physical attractiveness, a finding consistent with the good genes and the sexy son hypotheses (Buss & Schmitt, 1993; Gangestad & Simpson, 1990; Kenrick et al., 1990). Women also seem to elevate the importance they place on *immediate resources* in the short-term mating context (Buss & Schmitt, 1993). Women say that they desire a short-term mate who has an extravagant lifestyle, spends a lot of money on them early on, and who gives them gifts early in the relationship. These findings support the resource accrual hypothesis.

Several studies have found that women who have affairs are significantly less happy with their current partner, emotionally and sexually, than women who do not (Glass & Wright, 1985; Kinsey et al., 1953). This provides circumstantial support for the mate switching hypothesis.

Glass and Wright (1992) examined seventeen potential "justifications" for extramarital affairs, ranging from "for fun" to "in order to advance my career." Women rated love (e.g., falling in love with the other person) and emotional intimacy (e.g., having someone who understands your problems and feelings) as the most compelling justifications for an affair. Furthermore, 77 percent of the women viewed love as a compelling justification, compared with only 43 percent of the men. These findings provide circumstantial support for the short-term for long-term goals and mate switching hypotheses.

One study (Greiling & Buss, 2000) examined the benefits women perceive as likely to come from affairs, how beneficial these things would be if they were received, and the

contexts in which women perceive that they would be likely to have an affair. The researchers also examined women who actively pursue short-term matings and asked them what benefits come from it. The following section summarizes the results of these studies, but several important limitations must be considered. Women's beliefs about the benefits of short-term mating do not necessarily make those benefits part of the selection pressure that led to the evolution of women's short-term mating psychology. The actual adaptive benefits that led to the evolution of women's short-term mating psychology may lie outside women's awareness. Furthermore, the benefits women actually receive in modern contexts may not mirror the adaptive benefits ancestral women received from short-term mating. With these limitations in mind, let's turn to the results.

**Hypotheses Supported: Mate Switching, Mate Expulsion, and Resources.** The two hypotheses receiving strong support across studies are the mate expulsion and mate switching hypotheses. One study (Greiling & Buss, 2000) examined women's perceptions of the likelihood of receiving twenty-eight specific benefits from extra-pair copulations. Women reported that engaging in an extra-pair mating made it easier for a woman to break up with her current partner (sixth most likely benefit to receive) and more likely that a woman would find a partner who she felt was more desirable than her current partner (fourth most likely benefit to receive). Interestingly, the benefit judged to be most likely to be received—sexual gratification—was not central to any of the hypotheses under investigation.

Another study examined the *contexts* that might prompt a woman to have an affair. Greiling and Buss (2000) found that the contexts most likely to promote an extra-pair mating were discovering that a partner was having an affair, having a partner who was unwilling to engage in sexual relations, and having a partner who was abusive to her—all contexts that might promote a breakup. Following closely on the heels of these contexts were feeling that she could find someone with whom she would be more compatible than her current partner, meeting someone who is willing to spend a lot of time with her, and meeting someone who is more successful and has better financial prospects than her current partner. These findings across studies support the hypothesis that mate switching may be a key function of short-term mating for women.

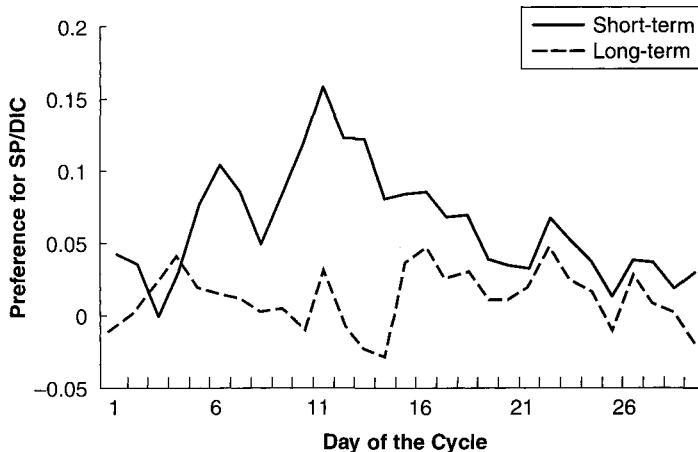
Two of the resource hypotheses received support from two or more studies. Women were judged to be highly likely to receive resources in exchange for sex, such as free dinners, money, jewelry, or clothing (tenth most likely to receive out of the list of twenty-eight). These benefits, though, were judged to be only moderately beneficial when compared with other potential benefits a woman could accrue through short-term mating. The *contexts* that were judged to promote an extra-pair encounter, however, included having a current partner who could not hold down a job and meeting someone with better financial prospects than her current partner. These contexts suggest that access to resources, or lack thereof, may be important in a woman's decision to have an extra-pair sexual liaison and imply a long-term interest in having a mate with resources rather than an exchange of sex for immediate access to resources.

**Hypothesis That Is Promising: Short-Term for Long-Term Goals.** Another hypothesis that has received empirical support is that women use short-term mating as a means to evaluate a man as a long-term mate. Women find the attribute of the man already "being in an existing relationship" moderately undesirable in a short-term mate (Buss & Schmitt,

1993). If a man is already in an existing committed relationship, it lowers the odds that a short-term sexual encounter with him will lead to a long-term relationship with him. Men seeking short-term mates, in contrast, are not bothered by the fact that the woman is already in a relationship. Women also find promiscuity to be especially undesirable in a short-term mate, presumably because promiscuity signals that the man is pursuing a short-term rather than a long-term mating strategy (Buss & Schmitt, 1993). A recent study examined nine possible reasons for having casual sex. After “I was physically attracted to the person,” the second most important reason women cited was: “I actually wanted a long-term relationship with this person and thought the casual sex might lead to something more long-lasting” (Li & Kenrick, 2006). Although more research is clearly needed, all these findings support the hypothesis that some women use short-term mating as a means for assessing and evaluating a long-term mating prospect, or perhaps leveraging casual sex into a more committed relationship (Buss, 2003).

**Another Hypothesis That Is Promising: Good Genes.** The economics of the mating market suggest that women, in principle, can secure genes from a short-term affair partner that are superior to those of her regular partner. A highly desirable man is often willing to have a brief encounter with a less desirable woman, as long as she does not burden him with entangling commitments. The good genes hypothesis has been put to the test (Gangestad & Thornhill, 1997). The researchers measured genetic quality through the indicator of physical symmetry, as measured by calipers. Recall from Chapter 4 that symmetrical features are hypothesized to be heritable markers of health and fitness, signaling the presence of genes that facilitate resistance to diseases and other environmental insults. The researchers found that symmetrical men, compared to their more lopsided peers, tended to be more likely to have sexual relations with women who were already in relationships. That is, women appear to be choosing symmetrical men as affair partners, providing one piece of evidence that women might be going for good genes in short-term mating. Furthermore, in short-term mating, women place a great premium on physical attractiveness and “desirability to other women” (Buss & Schmitt, 1993; Gangestad & Thornhill, 1997; Li & Kenrick, 2006; Scheib, 2001). Another study found that for the context of casual sex, women prefer men who are daring, confident, strong, humorous, and successful with attractive women (Kruger, Fisher, & Jobling, 2003). In short-term mating, more than in long-term mating, women also prefer men who have a masculine facial architecture (Waynforth, Delwadia, & Camm, 2005). On the assumption that masculine features are honest signals of good genes (see Chapter 4), this preference suggests that women are seeking short-term mates for the genetic benefits they provide.

The strongest support for the good genes hypothesis of women’s short-term mating comes from a raft of studies on how women’s preferences shift around ovulation, the peak time of a woman’s fertility (Gangestad et al., 2005). It is only during this fertile window that any genetic benefits can be reaped from short-term mating. Research has documented several shifts in women’s preferences at ovulation compared to other times of their cycle: (1) an increased attraction to men with *symmetrical features*; (2) an increased preference for *facial masculinity*; (3) an increased preference for men who are *tall* (Pawlowski & Jasienska, 2005); (4) an increased preference for men who display *creative intelligence* (Haselton & Miller, 2006); (5) an increased preference for men who are *physically attractive* and *muscular*; and (6) an increased preference for men who display social presence and direct intrasexual competitiveness—qualities that indicate *social dominance* (see Figure 6.4).



**FIGURE 6.4** Women's Preference for Men Who Display Social Presence (SP) and Direct Intrasexual Competitiveness (DIC) as Short-Term Partners (*solid line*) and Long-Term Partners (*dotted line*) as a Function of Day of Their Menstrual Cycle.

Source: Gangestad, S. W., Simpson, J. A., Cousins, A. J., Garver-Apgar, C. E., & Christensen, P. N. (2004). Women's preferences of male behavioral displays change across the menstrual cycle. *Psychological Science*, 15, 203–207.

Theoretically, women with existing mates could only receive genetic benefits through short-term mating if the genetic quality of their regular partner was low relative to the genetic quality of their extra-pair partner (Pillsworth, Haselton, & Buss, 2004). Indeed, women who rate their partners low on sexual attractiveness experience greater sexual desire for extra-pair partners, but only at ovulation (Pillsworth & Haselton, 2006). And women seem to choose as affair partners men who have symmetrical features, a hypothesized indicator of good genes (Gangestad, Thornhill, & Garver-Apgar, 2005). These findings support the hypothesis that women are going for genes that will contribute to their offspring being sexually successful. These studies all point to the viability of the good genes hypothesis as one explanation for why women have short-term extra-pair matings.

**Taking Stock of the Evolved Functions of Women's Short-Term Mating.** Several hypotheses about the evolved functions of women's short-term mating have received some empirical support: (1) switching mates, (2) using short-term mating for long-term mating goals, (3) acquiring resources, and (4) obtaining good genes or sexy son genes. There is no requirement that women's short-term mating has one and only one function. It could have several. Women already mated to men who are low in mate value, for example, could use short-term mating to switch to a man of higher mate value. Other women might use short-term mating to assess and evaluate a man as a long-term prospect, or have sex with him for the goal of turning it into a more committed relationship. Women who live in circumstances

of resource scarcity or women who are unable to attract a long-term mate might use short-term mating to acquire vital resources. And women already mated with men of low genetic quality can use short-term mating, particularly around the time of ovulation, to secure better genes.

Even these hypothesized functions might underestimate the complexity of women's short-term sexual psychology. Female sexuality, from a male perspective, is an extraordinarily valuable reproductive resource. From a female perspective, this resource is extremely *fungible*, meaning that it can be exchanged or converted into other resources (Meston & Buss, *in press*). We can expect future research to explore the complexity of female short-term sexual psychology by clarifying *which women* pursue short-term mating in *which contexts* to secure *which adaptive benefits*.

## ■ CONTEXT EFFECTS ON SHORT-TERM MATING

### Individual Differences in Short-Term Mating

One window for viewing short-term mating is to contrast the subjective perceptions of costs and benefits of women who actively pursue short-term mating with those who do not. Greiling and Buss (2000) asked a sample of women to complete the Sociosexuality Orientation Inventory (SOI) (Gangestad & Simpson, 1990), which assesses individual differences in whether people pursue short-term or long-term mating strategies. Women's scores on the SOI were then correlated with their perceptions of the benefits they would likely receive from short-term mating and with their perceptions of the magnitude of benefits received from short-term mating. Women who pursue short-term mating have substantially different perceptions of the benefits compared to women who tend not to pursue short-term mating. Women who tend to pursue short-term mating view three classes of benefits as more beneficial. One pertains to sexual resources. Women pursuing short-term mating view as highly beneficial having a sexual partner who is willing to experiment sexually ( $r = +.51$ ), experiencing orgasms with the sexual partner ( $r = +.47$ ), and experiencing great sexual pleasure because the partner was physically attractive ( $r = +.39$ ).

Such women also see more benefits to improving their skills of attraction and seduction ( $r = +.50$ ), supporting the mate skill acquisition hypothesis. They also view the resources from short-term mating as more beneficial, including expensive designer clothing ( $r = +.45$ ), career advancement ( $r = +.40$ ), jewelry ( $r = +.37$ ), and the use of a partner's car ( $r = +.35$ ).

Women who tend to pursue short-term mating also have different perceptions of the contexts likely to promote short-term mating. Having a regular partner who is fired ( $r = +.29$ ), suffers a decrease in salary ( $r = +.25$ ), or becomes terminally ill ( $r = +.23$ ) is viewed as increasing the odds of short-term mating by such women. These results support the mate switching hypothesis—women who indicate that they have pursued short-term matings are more likely to cite problems with a partner as a rationale for an affair. Furthermore, meeting someone who is better looking than one's regular partner is perceived by such women as more likely to lead to an extra-pair mating ( $r = +.25$ ).

Another study of individual differences using the SOI focused on shifts in "desire for commitment" from a partner (Townsend & Wasserman, 1998). Desire for commitment was

measured by using items such as "I would like to know whether he/she was available for a more involved relationship (for example, not involved with anyone else at the time)" (p. 183). Women who pursue short-term mating strategies, compared with their more long-term-oriented peers, were considerably more willing to have sex without requiring signs of commitment from the man. Furthermore, they placed a significantly greater emphasis on the man's popularity and physical attractiveness—lending circumstantial support to the sexy son hypothesis of women's short-term mating (see also Townsend, 1998).

Two clusters of costs are viewed by short-term mating women as less likely to be incurred. The first is reputational damage. Such women view reputational damage among friends, potential partners, and high-status peer groups as significantly *less* likely to occur than do women not actively oriented toward short-term mating ( $r = -.47$ ). Perhaps such women select contexts in which these costs are less likely to be incurred, such as a large city or when the current partner is out of town. Taken together, these findings support several of the hypothesized benefits of extra-pair mating, especially resource, mate switching, and good genes benefits.

## Other Contexts Likely to Affect Short-Term Mating

Everyone knows some men who are womanizers and others who would never stray. Everyone knows some women who enjoy casual sex and others who could not imagine sex without commitment. Individuals differ in their proclivities for casual mating. Individuals also shift their proclivities at different times and in different contexts. These variations in sexual strategy depend on a wide variety of social, cultural, and ecological conditions.

**Father Absence and Stepfather Presence.** The absence of a father while growing up has been reliably linked with the pursuit of a short-term mating strategy. Among the Mayan of Belize and the Ache of Paraguay, for example, father absence is correlated with men stating that they are unwilling to commit the time, energy, and resources needed to sustain a long-term mating relationship (Waynfirth, Hurtado, & Hill, 1998). Other studies of both women and men have found that those growing up in father-absent homes are more likely to reach puberty sooner, to engage in sexual intercourse earlier, and to pursue a short-term mating strategy (e.g., Ellis, McFadyen-Ketchum, Dodge, Pettis, & Bates, 1999; Surbey, 1998b). Intriguingly, one study found that stepfather presence, even more than biological father absence, may be the critical factor promoting early sexual maturation in girls—a likely precursor to the pursuit of a short-term mating strategy (Ellis & Garber, 2000). Conversely, biological fathers may do more "daughter guarding," that is, engaging in behavior that prevents their daughters from engaging in sexual intercourse early (Surbey, 1998b). Finally, poor attachment to one's parents was linked to sexual promiscuity for both sexes (Walsh, 1995, 1999).

**Transitions across Life.** Casual sex is also related to people's developmental stage in life. Adolescents in many cultures are more prone to temporary mating as a means of assessing their value on the mating market, experimenting with different strategies, honing their attraction skills, and clarifying their own preferences (Frayser, 1985). After they have done so, they are more ready for marriage. The fact that premarital adolescent sexual experimentation

is tolerated and even encouraged in some cultures, such as the Mehinaku of Amazonia (Gregor, 1985), provides a clue that short-term mating is related to one's stage in life.

The transition points between different committed mateships offer additional opportunities for casual sex. After a divorce, for example, it is crucial to reassess one's value on the current mating market. The existence of children from the marriage generally lowers the desirability of divorced people, compared with their hypothetical desirability if they had no children. The elevated status that comes with being more advanced in a career, on the other hand, may raise their desirability in comparison with the last time they were on the mating market.

**Sex Ratio.** The abundance or deficit of eligible men relative to eligible women is another critical context that affects temporary mating. Many factors affect this sex ratio, including wars, which kill larger numbers of men than women; risk-taking activities such as physical fights, which more frequently affect men; intentional homicides, in which roughly seven times more men than women die; and different remarriage rates by age, whereby with increasing age women remarry less often than men. Men shift to brief encounters when many women are sexually available because the sex ratio is in their favor and they are therefore better able to satisfy their desire for variety (Pedersen, 1991). Among the Ache, for example, men appear to be highly promiscuous because there are 50 percent more women than men (Hill & Hurtado, 1996). When there is a surplus of men, in contrast, both sexes appear to shift toward a long-term mating strategy marked by stable marriages and fewer divorces (Pedersen, 1991). In the most comprehensive cross-cultural study of sex ratio and sexual strategies, involving 14,059 individuals in forty-eight nations, people in cultures with a surplus of women were more likely to endorse attitudes and behaviors associated with a short-term mating strategy (Schmitt, 2005).

**Mate Value and Self-Esteem.** One final context that is likely to affect short-term mating is *mate value*, one's overall desirability to members of the opposite sex. The Self-Perceived Mating Success scale (Lalumiere, Seto, & Quinsey, 1995; Landolt, Lalumiere, & Quinsey, 1995) assesses mate value. Sample items from this scale are: "members of the opposite sex notice me"; "I receive many compliments from members of the opposite sex"; "members of the opposite sex are attracted to me"; and "relative to my peer group, I can get dates with great ease."

Scores on the mate value scale were correlated with the reported sexual history of the participants, both males and females. The results were strikingly different for the sexes. High-mate-value men, relative to their lower-mate-value counterparts, tended to have sexual intercourse at an earlier age, a greater number of sex partners since puberty, a greater number of partners during the past year, a greater number of sexual invitations within the past three years, sexual intercourse a greater number of times, and did not see a need to be attached to a person before having sex. Furthermore, high-mate-value men tended to score toward the high end of the Sociosexuality Orientation Inventory, suggesting that they are pursuing a short-term mating strategy.

Several other indicators of male mate value are linked with success at short-term mating. First, men who are high in status and resources—key indicators of men's mate value—tend to have a larger number of sex partners, indicating success at short-term mating (Kanazawa, 2003a; Perusse, 1993). Second, men high in social dominance—a predictor of future elevation in status—tend to be more unfaithful, indicating pursuit of short-term

mating (Egan & Angus, 2004). Third, men with a higher shoulder-to-hip ratio (SHR)—an indicator of men's bodily attractiveness discussed in Chapter 4—have sex at an earlier age, have more sex partners, and more extra-pair copulations, and are more likely to have sex with other people's mates (Hughes & Gallup, 2003). Fourth, men who compete in sports, and especially men who are successful athletic competitors, report having had a larger number of sex partners (Faurie, Pontier, & Raymond, 2004). Fifth, men who have attractive faces and masculine bodies have more short-term sex partners (Rhodes, Simmons, & Peters, 2005). In contrast, facial and bodily attractiveness of women were uncorrelated with number of sex partners. All these studies indicate that men high in mate value are more likely to pursue, and be successful at pursuing, a short-term mating strategy.

In sharp contrast, self-perceived mate value in women was not significantly linked with their pursuit of a short-term mating strategy, a finding replicated by other researchers (Mikach & Bailey, 1999). For women, however, self-esteem proved to be a highly significant predictor of short-term mating. Women scoring low on self-esteem, relative to their high self-esteem counterparts, tended to have a greater number of sex partners since puberty, a greater number of sex partners over the past year, a greater number of one-night stands, a preference for short-term sexual relationships, and scores on the SOI indicating the pursuit of a short-term mating strategy. Precisely why self-esteem appears to be such a powerful predictor of short-term mating for women remains an issue for future research.

## ■ SUMMARY

The scientific study of mating over the course of the twentieth century has focused nearly exclusively on marriage. Human anatomy, physiology, and psychology, however, betray an ancestral past filled with affairs. The obvious reproductive advantages of such affairs to men may have blinded scientists to their tremendous benefits to women. Affairs require willing women. Willing women require benefits.

In this chapter we first considered men's short-term mating. According to Trivers's theory of parental investment and sexual selection, the reproductive benefits to ancestral men as a consequence of short-term mating would have been direct—an increase in the number of children produced as a function of the number of women successfully inseminated. The empirical evidence is strong that men do have a greater desire for short-term mating than do women. Compared to women, men express a greater desire for a variety of sex partners, let less time elapse before seeking sexual intercourse, lower their standards dramatically when pursuing short-term mating, have more sexual fantasies and more fantasies involving a variety of sex partners, experience more sexual regret over missed sexual opportunities, have a larger number of extramarital affairs, and visit prostitutes more often. Although a few psychologists continue to deny these fundamental sex differences (e.g., Miller & Fishkin, 1997), the difference between men and women in the desire for sexual variety is one of the largest, most replicable, and most cross-culturally robust psychological sex differences ever documented (Schmitt et al., 2003; Schmitt, Shackelford, & Buss, 2001).

Mathematically, however, short-term mating requires two. Except for forced copulation, men's desire for short-term sex could not have evolved without the presence of some willing women. We looked at the evidence that some women historically have engaged in short-term mating some of the time. The existence of physiological clues in men, such as

testicle size and variations in sperm insemination, suggest a long evolutionary history of *sperm competition*—in which the sperm from two different men have inhabited a woman’s reproductive tract at the same time. From an evolutionary perspective it is unlikely that women would have recurrently engaged in short-term mating without reaping some adaptive benefits.

There are potentially five classes of adaptive benefits to women: economic or material resources, genetic benefits, mate switching benefits, short-term for long-term goals, and mate manipulation benefits. Based on the studies that have been conducted, the empirical evidence supports the hypothesized functions of mate switching, resource acquisition, short-term for long-term mating goals, and access to good genes or sexy son genes, and does not at all support status enhancement or mate manipulation benefits.

The final section of this chapter examined various context effects on short-term mating. Sex ratio is one context—a surplus of women tends to promote short-term mating in both sexes. Another important context is mate value, one’s desirability to members of the opposite sex. Men high in mate value, as indicated by status, dominance, high shoulder-to-hip ratio, success in sports, facial attractiveness, and masculine features, are more likely to pursue short-term mating, as reflected in measures such as younger age at first intercourse and a larger number of sex partners. Women’s self-perceived mate value is not related to the pursuit of short-term mating. However, women with low self-esteem appear to be more likely to pursue short-term mating than women with high self-esteem, as indexed by number of sex partners and an expressed preference for unattached, uncommitted sex.

## ■ SUGGESTED READINGS

- Ellis, B. J., & Symons, D. (1990). Sex differences in fantasy: An evolutionary psychological approach. *Journal of Sex Research*, 27, 527–556.
- Gangestad, S. W., Thornhill, R., & Garver-Apgar, C. E. (2005). Adaptations to ovulation. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 344–371). New York: Wiley.
- Greiling, H., & Buss, D. M. (2000). Women’s sexual strategies: The hidden dimension of extra-pair mating. *Personality and Individual Differences*, 28, 929–963.
- Schmitt, D. P., Couden, A., & Baker, M. (2001). The effects of sex and temporal context on feelings of romantic desire: An experimental evaluation of sexual strategies theory. *Personality and Social Psychology Bulletin*, 27, 833–847.
- Surbey, M. K., & Conohan, C. D. (2000). Willingness to engage in casual sex: The role of parental qualities and perceived risk of aggression. *Human Nature*, 11, 367–386.