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"Attached" or "Unattached": With Whom do Men and Women Prefer to Mate, and Why?

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Abstract

A mate poacher is an individual who has sexual relations with someone whom the poacher knows is already in a nominally exclusive, long-term relationship. This article reviews research in which participants were asked to rate the likelihood that benefits and costs exclusively associated with poaching would motivate them to attract, respectively, an attached or an unattached individual, assuming that the potential mates are equally attractive. The results indicated that for men and women to be motivated to poach, the attached individual must be perceived as being more attractive than the unattached individual. Discussion suggests that mate poaching may sometimes be pursued as an alternative to coercive mating strategies, by individuals who are unable to secure unattached mates of acceptable attractiveness. We further hypothesize that individuals may pursue a hierarchy of conditional mating strategies from attracting unattached individuals, through poaching, to coercion. Additional findings of sex differences in perceptions of benefits and costs exclusive to poaching also are discussed.

INTRODUCTION

Just as it takes two to tango, it takes two to commit a sexual infidelity; the cheater and his or her lover. Nevertheless, although research investigating the psychology of individuals in exclusive relationships who cheat on their partners has been ongoing for several decades (for a review, see Thompson, 1983), it was not until 1988 that even the idea of conducting research into the psychology of those individuals with whom cheaters commit a sexual infidelity was first suggested in a published work. This was made by Buss (1988) in an article investigating mate retention tactics (i.e., the ways that individuals attempt to prevent their partners from being unfaithful). Buss stated, "Several further research directions are

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indicated. The occurrence of mate retention tactics implies the presence of poachers" (Buss, 1988, p. 315). Over a decade would pass, however, before the first studies investigating the psychology of these poachers, who solicit individuals in exclusive romantic relationships to commit a sexual infidelity with them, were published. These four studies were carried out in 2001 by Schmitt and Buss (2001). Schmitt and Buss provided the label poached to those, "taken away from their established relationships" (p. 895), and the label poachees to, "those whose partners are taken away from them" (p. 895).

This chief focus of this article is a study by Davies, Shackelford, and Hass (2006a) that investigated the decision-making process of individuals when they are contemplating whether or not to poach someone. Because both the seminal paper on mate poaching by Schmitt and Buss (2001), as well as the paper by Davies *et al.* which we highlight in this article, were informed by an evolutionary psychological perspective, we first briefly outline the principles of evolutionary psychology. We next outline the findings of three studies which have investigated the frequency of the occurrence of poaching.

The Evolutionary Psychological Perspective

Evolutionary psychology attempts to make sense of current human thought, emotion, and behavior by careful consideration of human evolutionary history. Over this period of time humans have faced many adaptive problems that needed to be solved to survive and reproduce. Generation after generation, over millions of years, natural selection gradually shaped the human brain, favoring circuitry that was good at solving these adaptive problems of our ancestors. The study of psychological adaptations (or evolved psychological mechanisms) is central to evolutionary psychology.

An evolved psychological mechanism is an information-processing module that was selected throughout a species' evolutionary history because it reliably produced behavior that solved a particular adaptive problem (Tooby & Cosmides, 1992). Evolved psychological mechanisms are understood in terms of their specific input, decision rules, and output (Buss, 1995). Each psychological mechanism evolved to take in a narrow range of information - information specific to a particular adaptive problem. The information (or input) that the organism receives signals the adaptive problem that is being confronted. The input (either internal or external) is then transformed into output (i.e., behavior, physiological activity, or input relayed to another psychological mechanism) via a decision rule - an "if, then" procedure. An example of the input, decision rules, and output of a psychological mechanism is appropriate.

Fruit can either be ripe or unripe. Because ripe fruit is more nutritious (i.e., calorically dense) than immature fruit, humans have evolved a preference for ripe fruit. The decision rule regarding the selection of fruit might proceed as follows: "If

the fruit tastes sweet, then eat it." If all fruit was maximally saturated with sugar all of the time, then that particular decision rule would not exist. The output associated with this mechanism might be to eat the ripe fruit or to discard the unripe fruit. This example illustrates the fact that psychological mechanisms can operate without any conscious awareness or formal learning, and that we are often blind to their underlying logic. Do you enjoy calorically dense fruit because it provides nutrition needed to carry out activities related to survival and reproduction? Or do you simply enjoy sweet fruit?

Some psychologists seem to be hostile to the idea of applying evolutionary theories to human behavior. One cause of this unwarranted hostility is the misconception that evolutionary analyses are incompatible with (or less important than) non-evolutionary (e.g., sociological or cultural) analyses. Such critics fail to recognize that evolutionary and non-evolutionary approaches operate at different levels of analysis (Tinbergen, 1963). Evolutionary scientists are typically interested in causation at the ultimate (or distal) level. An ultimate explanation refers to the evolved function of a trait, behavior, or mechanism. This is in contrast to proximate explanations. Although, of course, the mechanisms by which proximate causes are effected have, themselves, evolved, proximate explanations refer to the immediate, non-evolutionary causes of a trait, behavior, or mechanism (e.g., the genetic or cellular causes). In our example of the input, decision rules, and output of a psychological mechanism associated with ripe fruit, one could correctly note that humans prefer ripe fruit because it is perceived to be sweet (proximate cause) and because it provides needed calories to perform duties related to survival and reproduction (ultimate cause). Although the explanations are fundamentally different, they are compatible and equally important. But it is also possible and not uncommon to have competing explanations at the same level of analysis (e.g., competing evolutionary psychological hypotheses); such debate is a healthy feature of science.

The modern application of evolutionary principles to the study of human psychology and behavior has opened up new lines of research. Schmitt and Buss (2001), for example, used the principles of evolutionary psychology to offer the following delineation as to how the psychology of mate poaching may have evolved. At any one time during the evolution of human psychology, there likely will have been individuals who had mates and individuals who did not have mates. It follows that individuals who had only psychological mechanisms that motivated desire for and successful mating with unmated individuals may have been at a relative reproductive disadvantage. This is because they would have been outcompeted in the arena of reproduction by any men and women who, in addition, possessed psychological mechanisms that motivated the desire to mate with already-mated individuals (under certain conditions) and the behavioral output that enabled successful mating with them. Accordingly, the latter individuals possessing both types of mechanisms would have been selected for, whereas the former individuals would have been selected against.

The Frequency of Mate Poaching

The goal of Schmitt and Buss's (2001) Study 1, in which they formally defined mate poaching as, "behavior intended to attract someone who is already in a romantic relationship" (p. 894), was to determine the frequency of mate poaching. Results from a sample of American undergraduates, indicated that poaching is a prevalent phenomenon. For instance, 64% of men and 49% of women reported having, at some time, attempted to poach someone as a short-term mate and 32% of men and 22% of women reported having "frequently" experienced someone attempting to poach them as a short-term mate.

Employing the same formal definition of poaching as Schmitt and Buss (2001), Schmitt, Alcalay, Allik, Angleitner, Ault, Austers, *et al.* (2004) investigated the frequency of poaching in a cross-cultural investigation that used samples consisting of college students or community members from 53 nations spanning five continents. They found levels of poaching that broadly paralleled those found by Schmitt and Buss. For instance, Schmitt *et al.* found that, in North American from Canada, Mexico and the United States, 62% of men and 40% of women reported having, at some time, attempted to poach someone as a short-term mate and 63% of men and 52% of women reported having, at some time, attempted to poach someone as a long-term mate. In addition, 70% of men and 38% of women in samples from South America (Argentina, Bolivia, Brazil, Chile and Peru) reported having, at some time, attempted to poach someone as a short-term mate and 63% of men and 29% of women in samples from Africa (including, Botswana, Ethiopia, and Zimbabwe) reported having, at some time, attempted to poach someone as a long-term mate.

Davies, Shackelford and Hass (2005a) investigated whether significant percentages of individuals would still report having experience with poaching if they were presented with a survey whose devising was informed by a definition of poaching that more clearly demarcated poaching from general romantic attraction (i.e. the attracting of unattached individuals), than that which informed the devising of the surveys presented to participants in the two earlier studies. Thus, unlike the earlier definition, that formulated by Davies *et al.* made it explicit that to be considered a poacher, the pursuing individual must be aware that the targeted individual is already in a romantic relationship and that this relationship must be considered by all parties (poacher, poached, and poachee) to be exclusive or monogamous, such that any sexual relations outside of this relationship are viewed as violating it. The definition formulated by Davies *et al.* was, "Mate poaching occurs when an individual has, or attempts to have, sexual relations with a person that the former individual knows is already in an exclusive relationship with someone else" (p. 9).

As expected, out of a possible 10 comparisons (five categories across two temporal contexts of poaching,), nine of the percentages of men in Davies *et al.* (2006a) who reported some experience with poaching were lower than the

corresponding percentages in Schmitt and Buss (2001) (p < .05 by the binomial sign test). Four of these differences were significant (z > 1.96). For instance, 70% of men in Davies *et al.*, as compared to 95% of men in Schmitt and Buss, reported that, at some time, someone had attempted to poach them as a short-term mate, 19% of men in Davies *et al.*, as compared to 43% of men in Schmitt and Buss, reported that, at some time, someone had successfully poached them as a long-term mate. Further, seven of the 10 percentages of women in Davies *et al.* were lower than the corresponding percentages in Schmitt and Buss. Three of these differences were significant (z > 1.96). For instance, 27% of women in Davies *et al.*, as compared to 63% of women in Schmitt and Buss, reported having, at some time, attempted to poach someone as a long-term mate and 64% of women in Davies *et al.*, as compared to 79% of women in Schmitt and Buss, reported that, at some time, someone had attempted to poach their partner as a long-term mate.

In addition, each of the six percentages for men in Davies *et al.* was lower than the corresponding percentages in Schmitt *et al.* (2004) (p < .05 by the binomial sign test). Four of these differences were significant (z > 1.96). For instance, 50% of men in Davies *et al.*, as compared to 63% of men in Schmitt *et al.*, reported having, at some time, attempted to poach someone as a long-term mate, and 19% of men in Davies *et al.*, as compared to 52% of men in Schmitt *et al.*, reported that, at some time, someone had successfully poached them as a long-term mate. Five of the six percentages in Schmitt *et al.* Two of these differences were significant (z > 1.96). 27% of women in Davies *et al.*, as compared to 52% of women in Schmitt *et al.*, reported having, at some time, attempted to poach someone as a long-term mate. Five of the six percentages in Schmitt *et al.*, as compared to 52% of women in Schmitt *et al.*, reported having, at some time, attempted to poach someone as a long-term mate; and 19% of women in Davies *et al.*, as compared to 52% of women in Schmitt *et al.*, reported having, at some time, attempted to poach someone as a long-term mate; and 19% of women in Davies *et al.*, as compared to 48% of women in Schmitt *et al.*, reported that, at some time, someone had successfully poached them as a long-term mate; and 19% of women in Davies *et al.*, as compared to 48% of women in Schmitt *et al.*, reported that, at some time, someone had successfully poached them as a long-term mate; and 19% of women in Davies *et al.*, as compared to 48% of women in Schmitt *et al.*, reported that, at some time, someone had successfully poached them as a long-term mate; and 19% of women in Davies *et al.*, as compared to 48% of women in Schmitt *et al.*, reported that, at some time, someone had successfully poached them as a long-term mate.

These comparisons indicated that, as expected by Davies *et al.* (2005a), the stricter definition of poaching caused fewer general romantic attractions to be reported as poaches. Davies *et al.* stated, "We conclude that the percentages of participants in the current study who reported some experience with poaching may be more representative of the actual percentages of people who have experienced poaching" (p. 13). Nevertheless, the percentages of participants in Davies *et al.* who reported having some experience with poaching were sizable for all categories of poaching and across all temporal contexts. The results of Davies *et al.*, therefore, corroborated those of Schmitt and Buss (2001) and Schmitt *et al.* (2004), indicating that poaching is an important means by which individuals both attempt to secure mates and are successful at doing so.

When do People Poach? The Hierarchy of Mating Strategies Hypothesis

Although the aforementioned studies indicated that poaching is a highly prevalent method by which to secure mates, it also appears that many people never engage in poaching. We shall, therefore, devote the rest of this article to outlining a study conducted by Davies *et al.* (2006), in which they attempted to determine if there were any factors peculiar to poaching that either motivated individuals to poach or deterred them from doing so. Specifically, the study asked participants to rate the extent to which benefits associated with poaching would motivate them personally to attempt to attract an attached individual instead of an unattached individual, and the extent to which costs associated with poaching would motivate them personally to attempt to attract an unattached individual instead of an attached individual. The benefits and costs considered in the study are listed in Table 1.

In addition, Davies *et al.* (2006a) framed each question such that participants were equally attracted to the attached and the unattached potential mates. This was done in order to control all variables extraneous to the relationship status of the targeted individuals and the particular benefit or cost of poaching considered in a particular question. The aim of this methodology was to ensure that participants' ratings of each benefit and cost would be based solely on whether the targeted individuals were attached or unattached. As such, Davies *et al.* (2006a) expected to gain insight into the influence that each benefit and cost associated with poaching would be likely to have on the decision-making process of individuals contemplating whether or not to poach.

Further, it was hoped that phrasing the questions such that participants were "equally attracted" to the potential mates, as opposed to stating that the potential mates were "equally attractive", might better allow each participant to imply his or her own criteria of attractiveness, including, not only physical attractiveness, but also such attributes as ambition, social status, wealth, health, kindness, and generosity (Davies, Shackelford & Goetz, in press). It was argued that this was important because several studies have found there to be sex differences and temporal context effects in preferences along attributes of mates (e.g., Buss, 1989; Buss & Schmitt, 1993).

To gain insight into motivations that are specific to poaching, Davies *et al.* (2006a) considered only benefits and costs that are exclusive to poaching - that is, those that do not pertain to general romantic attraction or attracting unattached individuals, as well as both a benefit and a cost that may also apply to general romantic attraction but which are especially likely to be encountered in the context of poaching. This latter benefit is, "Less likely to have to help raise or financially support the child." A question considering this benefit was presented only to male participants, as, argued Davies *et al.* (2006a), it does not seem reasonable that poaching, in comparison to attracting an unattached individual, would provide women with a greater opportunity to avoid economically investing in any children thus produced. Accordingly, asking female participants to rate this benefit would be

unlikely to provide insight that would be specific to poaching. The latter cost is, "Greater risk of raising baby on your own." A question considering this cost was presented only to female participants, for Davies *et al.* (2006a) contended that it does not seem reasonable that poaching a woman, as opposed to attracting an unattached woman, would increase this risk for a man. Accordingly, asking male participants to rate this benefit would be unlikely to provide insight that would be specific to poaching (Davies *et al.*, in press).

Davies et al. (2006a) used the following evolutionary reasoning to provide additional support for these arguments regarding the latter benefit and cost. First, men can never be certain that any child is their own and, due to their relatively small obligatory physiological investment in any child, can increase their reproductive success by having multiple mates, in attracting whom, resources have been shown to be important (Buss, 1989; Buss & Dedden, 1990; Schmitt, & Buss, 1996). Accordingly, men are expected to have an evolved psychology that motivates them to welcome opportunities which might enable them to avoid depleting their own resources through having other men unknowingly invest in their offspring - especially likely when poaching, as a poached woman already has a long-term partner (Davies et al., in press). Second, women's relatively great obligatory physiological investment in their children is expected to have caused them to evolve a psychology that motivates them to be especially wary of mating with men who may not economically invest in their children (Buss & Schmitt, 1993; Buunk, Angleitner, Obaid & Buss, 1996) – especially likely when poaching, as a poached man already has a long-term partner.

The foregoing aspects of Davies *et al.* (2006a) study are illustrated in Question 1 from the survey presented to participants:

"Suppose that there are two individuals to whom you are equally sexually attracted, and you know that one of them is in an exclusive relationship and the other is single. Would the suggested benefit 'freedom from the need to fully commit yourself to the poached' motivate you personally to attempt to attract the attached individual, instead of attempting to attract the unattached individual?"

As mating strategies have been shown to be sensitive to temporal context (Barash & Lipton, 2001; Buss & Schmitt, 1993; Schmitt & Buss, 1996), where appropriate, Davies *et al.* (2006a) investigated participants' ratings of benefits and costs across three temporal contexts of poaching. These were poachings for a short-term sexual partner or affair, a long-term sexual partner or affair, and a new exclusive relationship, in which the poached permanently abandons his or her initial relationship.

METHODS

Participants in Davies *et al.* (2006a) were 215 undergraduates at a public university in the southeastern United States (125 men, M age = 19.9 years, SD = 3.2; 90 women, M = 19.8, SD = 4.2). Participants completed a survey that asked them to rate the likelihood that several benefits and costs exclusive to poaching would, respectively, motivate them to poach or deter them from poaching. Participants provided ratings on a 10-point scale, with 0 = Definitely No, 4 = Probably No, 5 = Probably Yes, and 9 = Definitely Yes. A rating of "5" or greater for a benefit was interpreted as indicating that the benefit would motivate the participant to attempt to attract the attached individual instead of the unattached individual (i.e., the benefit would motivate the participant to attempt to attract the unattached individual instead of the attached individual (i.e., the cost would deter the participant from poaching).

RESULTS

We first consider the mean ratings provided by men and women in Davies *et al.* (2006a) for the benefits and costs of poaching. Next, we present additional findings regarding sex differences relating to ratings of benefits and costs. Table 1 presents mean ratings and standard deviations by sex for all benefits and costs. The results of all statistical tests were evaluated at $\alpha = .05$ (two-tailed).

	Sex of rater	
Benefit (poaching context)	Men	Women
	M(SD)	M(SD)
Freedom from the need to fully commit oneself to the poached	2.8 (2.5)	2.4 (2.3)
Person has been pre-approved by someone else (short-term)	2.9 (2.7)	2.3 (2.5)
Person has been pre-approved by someone else (long-term)	2.6 (2.5)	2.2 (2.6)
Person has been pre-approved by someone else (exclusive)	2.8 (2.6)	2.6 (2.9)
Excitement of an illicit affair	2.9 (2.8)	2.4 (2.5)
Challenge of trying to attract someone away from their partner (short-term)	3.6 (3.0)	2.3 (2.7)
Challenge of trying to attract someone away from their partner (long-term)	2.7 (2.7)	2.0 (2.4)
Challenge of trying to attract someone away from their partner (exclusive)	2.1 (2.4)	2.1 (2.6)
Gaining revenge on someone who has wronged you (short-term)	3.9 (3.0)	3.4 (3.0)
Gaining revenge on someone who has wronged you (long-term)	2.9 (2.8)	2.7 (2.7)

Table 1. Ratings of Benefits and Costs

Table 1. Continued

	Sex of rater	
Benefit (poaching context)	Men	Women
	M (SD)	M (SD)
Gaining revenge on someone who has wronged you (exclusive)	2.3 (2.5)	2.5 (2.9)
Ego is boosted (short-term)	4.4. (3.1)	3.2 (2.9)
Ego is boosted (long-term)	4.2 (3.1)	3.5 (3.1)
Ego is boosted (exclusive)	4.0 (3.1)	3.8 (3.4)
Less likely to have to help raise or financially support the child	2.4 (2.6)	N/A (N/A)
	Sex of rater	
Cost (poaching context)	Men	Women
	M (SD)	M (SD)
More bother and effort and less likely to be successful (short-term)	5.3 (2.9)	5.1 (2.9)
More bother and effort and less likely to be successful (long-term)	5.3 (2.9)	5.3 (2.8)
More bother and effort and less likely to be successful (exclusive)	5.6 (3.0)	5.7 (2.9)
Danger of being physically harmed (short-term)	3.9 (3.1)	4.8 (3.2)
Danger of being physically harmed (long-term)	4.0 (3.1)	5.0 (3.3)
Danger of being physically harmed (exclusive)	4.1 (3.2)	5.5 (3.0)
Stress of concealment and deception (short-term)	5.1 (3.0)	5.4 (2.9)
Stress of concealment and deception (long-term)	5.3 (3.0)	5.6 (3.0)
Stress of concealment and deception (exclusive)	5.9 (8.0)	5.8 (3.0)
Feelings of guilt and ethical concerns (short-term)	5.8 (2.8)	6.0 (2.8)
Feelings of guilt and ethical concerns (long-term)	5.9 (2.7)	6.0 (2.9)
Feelings of guilt and ethical concerns (exclusive)	6.1 (2.9)	6.6 (2.7)
Suffer shame and gain a bad reputation (short-term)	4.8 (2.9)	6.1 (2.9)
Suffer shame and gain a bad reputation (long-term)	4.8 (3.0)	6.3 (2.8)
Suffer shame and gain a bad reputation (exclusive)	5.0 (3.1)	6.5 (2.7)
Greater risk of raising baby on your own	N/A (N/A)	6.3 (3.0)
Sexually unfaithful to previous partner (exclusive)	6.0 (2.8)	5.8 (3.1)
Emotionally unfaithful to previous partner (exclusive)	4.8 (2.7)	4.5 (2.8)

Note: M = mean, SD = standard deviation, N/A = not applicable. See text for additional information.

Mean Ratings for Benefits and Costs Specific to Poaching

It can be seen from Table 1 that both men and women gave all benefits associated with poaching a mean rating of less than 5.0. The mean ratings provided by both men and women for the majority of the benefits were between 2.0 and 3.0. In contrast, the mean ratings given by both men and women for the majority (13 of

19) of the costs associated with poaching were above 5.0. Men gave a mean rating below 5.0 for five of the costs. Women gave a mean rating below 5.0 for three of the costs.

Sex Differences in Ratings for Benefits and Costs

There were significant sex differences in mean ratings given for several costs and benefits. Women rated the "danger of being physically harmed by the partner of the poached" a greater disincentive to poaching than did men, across all three temporal contexts: for a short-term sexual partner [t (212) = 2.14, p < .05]; for a long-term sexual partner [t (212) = 2.17, p < .05]; for a new monogamous relationship [t (212) = 3.05, p < .05]. Men gave a higher rating than women for the benefit, "challenge of trying to attract someone away from their partner," as a short-term sexual partner [t (213) = 3.33, p < .05] and for a long-term sexual affair [t (213) = 2.00, p < .05]. Men also gave a higher rating than women for the benefit of gaining an "ego boost" from successfully poaching someone as a short-term sexual partner [t (213) = 2.74, p < .05]. Women gave a higher rating than men for the cost "suffer shame and gain a bad reputation" if one becomes known to have poached someone, across all temporal contexts: for a short-term sexual partner [t (209) = 3.22, p < .05]; for a long-term sexual affair [t (207) = 3.64, p < .05].

DISCUSSION

We first discuss the mean ratings given by men and women to benefits and costs of poaching (Davies *et al.*, 2006a). We then consider additional findings regarding sex differences relating to ratings of benefits and costs.

Mean Ratings for Benefits and Costs Specific to Poaching

Davies *et al.* (2006a) asked participants whether benefits and costs exclusively associated with poaching would, motivate them personally to attract, respectively, an attached or an unattached individual, assuming that the potential mates are equally attractive. They found that men and women gave all benefits a mean rating of less than 5.0, indicating that these benefits would probably not motivate them to poach. In contrast, the mean ratings given by men and women for 13 of the 19 the costs were above 5.0, indicating that these costs would deter them from poaching. Men gave a mean rating above 5.0 for five of the costs. Women gave a mean rating above 5.0 for three of the costs. These results suggest that both sexes perceive the costs exclusively associated with poaching as outweighing the benefits exclusively

associated with poaching. Davies *et al.*, therefore, argued that, ceteris paribus, when given the choice, both men and women will reliably choose to mate with unattached, as opposed to attached, individuals. As such, the results indicate that people will avoid poaching if there is a sufficiently attractive unattached individual available or attainable. In other words, for men and women to be motivated to poach, argued Davies *et al.*, either any available attached individual must be perceived as being more attractive than any available unattached individual or there must be no unattached individual attainable.

These findings led Davies *et al.* (2006a) to suggest that, in some instances, poaching may be similar as a mating strategy (although not as morally reprehensible) to rape as depicted by Thornhill and Thornhill (1983) in their mate deprivation hypothesis. This hypothesis holds that rape is an evolved conditional mating strategy of men, engaged in when mates cannot be secured through non-aggressive strategies. Davies *et al.*, therefore, argued that, in some instances, poaching may be an evolved conditional strategy by which individuals who are unable to secure unattached mates of acceptable attractiveness, can avoid being left out of the mating game, without resorting to rape, in the case of men, or to aggressive seduction, in the case of women. This lead Davies *et al.* to hypothesize that men and women may pursue a hierarchy of conditional mating strategies. First, they try to attract an unattached individual of sufficient attractiveness. If none of acceptable attractiveness is available or attainable, some men and women may then resort to coercive mating strategies.

Davies *et al.* (2006a) stated that this hierarchy of mating strategies hypothesis is in accordance with the relative degree of opprobrium associated with these mating strategies. Thus, due to the fact that the costs incurred in terms of social standing increase as one moves down this hierarchy from attracting unattached individuals, through poaching, to coercion, individuals may do so only when the immediately higher strategy appears to be closed to them.

Sex Differences in Ratings for Benefits and Costs

In addition to the foregoing results, Davies *et al.* (2006a) found several sex differences regarding participants' perceptions of benefits and costs exclusively associated with poaching. They used the following evolutionary reasoning to speculate as to the causes of these findings. Across all three temporal contexts, women rated the cost "danger of being physically harmed by the partner of the poached" a greater deterrent to poach than did men. As fertilization is internal within women, men have paternity uncertainty. As such, men run the risk unknowingly investing economically in offspring to whom they are genetically unrelated, thus furthering the reproductive success of other men at their own expense. It follows that, over evolutionary time, men who prevented other men

from having sexual relations with their long-term partners by threatening or committing violence against such men, may have had greater reproductive success than men who did not. This will have produced selection pressure on men to evolve to be relatively ready to commit violence against men who might impregnate their long-term mates (Daly & Wilson, 1996; Wilson & Daly, 1985). This, in turn, may have caused men to evolve psychological mechanisms that motivate them to be wary of eliciting such violence. As such, it might be expected that, in comparison to women, men would have given relatively high ratings to the cost of possibly being physically harmed by the partners of individuals that they poach. A possible reason for the contrary finding, argued Davies et al. (2006a), is that violent male-male competition also would have generated selection pressures for men to be unwilling to display fear in response to threats of violence from rivals, so as to avoid giving competitors a psychological advantage. Thus, although men are expected to be more violent than women, they might be less likely to experience fear in response to threats of violence or more likely to self-deceive or to bluff about their fear, hence the lower ratings given by men.

Men gave a higher rating than women for the benefit, "challenge of trying to attract someone away from their partner," as a short-term sexual partner and for a long-term sexual affair but not for an exclusive long-term relationship. Davies et al. (2006a) argued that these findings might have been predicted from an evolutionary psychological perspective. Due to the tiny obligatory physiological investment that men make relative to women, men have a greater reproductive rate (i.e. the number of offspring can be produced per unit of time) and so gain relatively greater reproductive benefits from having multiple mates. As such, as fertile women are relatively scarce, men are subject to a relatively great intensity of intrasexual competition for mates. It follows that, relative to women, men may have evolved a psychology that motivates them to be more willing to undertake the challenges and risks associated with attracting mates for non-exclusive relationships (i.e. for shortterm sex or long-term sexual affairs) and to gain more of a thrill from doing so (Wilson & Daly, 1985). The reproductive benefits that men, in comparison to women, can secure from having multiple mates also may account for the finding that men gave a higher rating than women for the benefit of gaining an "ego boost" from successfully poaching someone as a short-term sexual partner.

Women provided a higher rating than men for the cost "suffer shame and gain a bad reputation" if one becomes known to have poached someone for a short-term sexual relationship, a long-term sexual affair, and an exclusive long-term relationship. Evolutionary psychological meta-theory predicts that, due to paternity uncertainty, men will have an evolved psychology that motivates them to avoid long-term commitments with women who have a reputation for being sexually promiscuous (Buss, 1989). Accordingly, Davies *et al.* (2006a) argued that it might be predicted that women will have, in turn, evolved a psychology that motivates them to avoid gaining such a reputation. This may account for the relatively high rating given by women to the cost associated with gaining a reputation for poaching

individuals for relationships other than those that are both long-term and monogamous. This argument does not, however, account for why women wish to avoid a reputation for having poached someone for a monogamous, long-term relationship. Davies *et al.* (2006a), therefore, stated that future research might query individuals about their views on forming an exclusive long-term relationship with someone who has a reputation for being a poacher. If men indicate that they would be unwilling to form a long-term relationship with women who have a reputation for poaching individuals for such a relationship, this would be consistent with women's unwillingness to gain a reputation for doing so.

Davies *et al.* (2006a) found it interesting that the only significant sex differences identified in their study were that men reported that certain benefits would be more likely to motivate them to poach and that women reported that certain costs would be more likely to deter them from poaching. They stated that, although it is important to keep in mind that men gave all of the benefits a rating of less than 5.0 - indicating that none of the benefits would be likely to motivate them to poach - these sex differences suggest that, in comparison to women, for men to be motivated to poach, the attached individual need not be so much more attractive than the unattached individual. This lead Davies *et al.* to predict that men may be more ready than women to move down the aforementioned hierarchy of mating strategies from general romantic attraction to poaching. This prediction is supported by findings that, across numerous world regions, men report engaging in more poaching attempts than do women (Schmitt & Buss, 2001; Schmitt *et al.* 2004; Davies *et al.*, 2006a).

Limitations and Future Directions

Davies *et al.* (2006a) discussed several aspects in which their study might be limited and how some of these limitations might be addressed in future research. As none of the benefits but most of the costs exclusively associated with poaching received a rating above 5.0, Davies *et al.* concluded that their results indicate that men and women will choose to poach only when the attached individual is sufficiently more attractive than the unattached individual. They suggested that it might be argued, however, that they simply failed to identify any of the benefits exclusively associated with poaching that would motivate individuals to poach. Davies *et al.* believed this to be unlikely. This is due to the fact that they presented participants with all benefits exclusively associated with poaching literature, as well as additional potential benefits that they derived from evolutionary psychological principles. It, therefore, seems reasonable to assume, argued Davies *et al.*, that if there are benefits exclusive to poaching which do motivate individuals to poach, at least one of the benefits presented to participants in their study would be among them.

As with any study that employs a self-report methodology, there is always the possibility that participants' responses may be influenced by social desirability

concerns. Thus, participants may have failed to give any of the benefits a rating greater than 5.0 due to social norms that frown upon the stealing of the romantic partners of others. Davies et al. (2006a) contended that these concerns are somewhat mitigated by the fact that participants were assured both verbally and in written form of the anonymity of their responses. Self-presentation concerns may, however, still have made some participants reluctant to report that any of the benefits would motivate them to poach. Nevertheless, around 50% of men and 30% of women in their sample reported having attempted to poach someone at some time (Davies et al., 2006a). Thus, argued Davies et al., as it does not seem reasonable that self-presentation concerns would have prevented participants from admitting that any of the benefits would motivate them to poach, while failing to prevent them from admitting to actually having attempted to poach, it appears unlikely that such concerns greatly influenced participants' ratings of benefits. Davies *et al.* stated that it seems reasonable, therefore, to accept the finding that none of the benefits considered in the current study are substantial enough to motivate any of the participants to poach when the available attached and unattached individuals are perceived as being equally attractive.

Davies *et al.* (2006a) suggested that their finding that for men and women to be motivated to poach, any available attached individual must be perceived as being more attractive than any available unattached individual, indicates that an issue that should be investigated in future research is how much more attractive than an unattached individual must an attached individual be if someone is to be motivated to poach. Further, given the aforementioned hypothesis that men may be more ready to move from attracting unattached individuals to poaching, there would be value in such research investigating sex differences in any such attractiveness disparity.

Another limitation suggested by Davies *et al.* (2006a), is that participants were asked to rate each benefit in sequential order and before they had been presented with any of the costs. As ratings are likely to be relative, not absolute, the ratings given by participants may, thus, have been influenced by order effects and the fact that participants were unable to consider all of the benefits and costs before providing ratings. Actual potential poachers are likely to weigh-up all benefits and all costs against each other simultaneously. In reality, therefore, the decision-making process undergone by individuals contemplating a mate poach is likely to be more complicated than that suggested by the question format used in the present study, in which each benefit and cost was isolated from all others. Davies *et al.* stated that future research into the motivations for and against poaching that addresses these limitations might secure ratings that better reflect the influence that particular benefits and costs have on poaching decisions.

An additional potential limitation considered by Davies *et al.* (2006a) is that it was assumed in constructing the survey that the benefits and costs of poaching are independent. This assumption may not be correct. For instance, the costs, "risk of being physically harmed" and "stress of concealment and deception" may be

related to the benefits, "challenge of trying to attract someone away from their partner" and "excitement of an illicit affair." Davies *et al.*, therefore, suggested that there is likely to be value in considering such reciprocal relationships in future studies.

Davies *et al.* (2006a) suggested several variables not considered in their study that would be worthwhile considering in future research. These include whether the potential poacher is attached or unattached, whether he or she has dependent children, as well as whether the potential poached has dependent children. Davies *et al.* stated that such factors might affect any cost-benefit analyses conducted by individuals when they are deciding whether to poach.

Conclusion

The research reported by Davies *et al.* (2006a) provides novel insights that are specific to human mate poaching. Their study is unique in that, by presenting participants with questions in which all other variables were controlled, participants' choice of mating strategy was dependent solely on variables relating to whether the potential mates were attached or unattached. Results indicating that poaching may be pursued only if there are no unattached individuals of sufficient attractiveness available, lead to the hypothesis that poaching may fall between general romantic attraction and coercive strategies in a hierarchy of conditional mating strategies. At present, however, empirical evidence in support of this hierarchy of mating strategies hypothesis is, at best, nascent. As such, the hypothesis is still somewhat speculative and needs to be subjected to much further empirical testing before being more firmly accepted.

REFERENCES

Barash, D.P., & Lipton, J.E. (2001). The myth of monogamy. New York: Freeman.

- Buss, D.M. (1988a). The evolution of human intrasexual competition: Tactics of mate attraction. *Journal of Personality and Social Psychology*, 54, 616-628.
- Buss, D.M. (1989). Sex differences in human mate preferences: Evolutionary hypothesis tested in 37 cultures. *Behavioral and Brain Science*, *12*, 1-49.
- Buss, D.M. (1994). The evolution of desire. New York: Basic Books.
- Buss, D.M. (1995). Evolutionary psychology: A new paradigm for psychological science. *Psychological Inquiry*, *6*, 1-20.
- Buss, D.M. (2004). Evolutionary psychology (2nd ed.). Boston, MA: Allyn & Bacon.
- Buss, D.M., & Dedden, L.A. (1990). Derogation of competitors. *Journal of Social and Personal Relationships*, 7, 395-422.

- Buss, D.M., Larsen, R.J., Westen, D., & Semmelroth, J. (1992). Sex differences in jealousy: Evolution, physiology, and psychology. *Psychological Science*, 3, 251–255.
- Buss, D.M., Shackelford, T.K., Kirkpatrick, L.A., Choe, J.C., Lim, H.K., Hasegawa, M., Hasegawa, T., & Bennett, K. (1999). Jealousy and the nature of beliefs about infidelity: Tests of competing hypotheses about sex differences in the United States, Korea and Japan. *Personal Relationships*, 6, 125-150.
- Buss, D.M., & Schmitt, D.P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204-232
- Buss, D.M., & Schmitt, D.P. (1996). Strategic self-promotion and competitor derogation: Sex and context effects on the perceived effectiveness of mate attraction tactics. *Journal of Personality and Social Psychology*, 70, 1185-1204.
- Buunk, B.P., Angleitner, A., Obaid, V., & Buss, D.M. (1996). Sex differences in jealousy in evolutionary and cultural perspective: Tests from the Netherlands, Germany, and the United States. *Psychological Science*, 7, 359-363.
- Daly, M., & Wilson, M. (1996). Evolutionary psychology and marital conflict: The relevance of stepchildren. In D.M. Buss, & N. Malamuth (Eds.), *Sex, power, conflict* (pp. 9-28). New York: Oxford University Press.
- Davies, A.P.C., Shackelford, T.K., & Hass, R.G. (2006a). When a "poach" is not a poach: Re-defining human mate poaching and re-estimating its frequency. Manuscript under editorial review.
- Davies, A.P.C., Shackelford, T.K., & Goetz, A.T. (in press). The "other" man and the "other" woman: Infidelity from the perspective of mate poachers. In P.R. Peluso (Ed.), *Infidelity (Routledge series on family therapy)*. New York: Routledge.
- Lieberman, D., Tooby, J., & Cosmides, L. (2003). Does morality have a biological basis? An empirical test of the factors governing moral sentiments relating to incest. *Proceedings of the Royal Society of London, B, 270*, 819-826
- Sagarin, B.J., Becker, D.V., Guadagno, R.E., Nicastle, L.D., & Millevoi, A. (2003). Sex differences (and similarities) in jealousy: The moderating influence of infidelity experience and sexual orientation of the infidelity. *Evolution and Human Behavior*, 24, 17-23.
- Schmitt, D.P., & Buss, D.M. (1996). Strategic self-promotion and competitor derogation: Sex and context effects on perceived effectiveness of mate attraction tactics. *Journal of Personality and Social Psychology*, 70, 1185-1204.
- Schmitt, D.P., & Buss, D.M. (2001). Human mate poaching: Tactics and temptations for infiltrating existing relationships. *Journal of Personality and Social Psychology*, 86, 560-584
- Schmitt, D.P., Alcalay, L., Allik, J.,, Angleitner A., Ault, L., Austers, I., et al. (2004). Patterns and universals of mate poaching across 53 nations: The effects of sex, culture, and personality on romantically attracting another person's partner. Journal of Personality and Social Psychology, 86, 560-584.

- Thompson, A.P. (1983). Extramarital sex: A review of the research literature. *The Journal* of Sex Research, 19, 1-22.
- Thornhill, R., & Thornhill, N.W. (1983). Human rape: An evolutionary analysis. *Ethology and Sociobiology*, *4*, 137–173.
- Tinbergen, N. (1963). On aims and methods of ethology. *Zeitschrift fur Tierpsychologie*, 20, 410-433.
- Tooby, J., & Cosmides, L. (1992). The psychological foundations of culture. In J.H. Barkow, L. Cosmides, & J. Tooby (Eds.), *The adapted mind* (pp. 19-136). New York: Oxford University Press.
- Trivers, R.L. (1972). Parental investment and sexual selection. In B. Campbell (Ed.) Sexual selection and the descent of man, 1871-1971 (pp. 136-179). Chicago: Aldine-Atherton.
- Wilson, M., & Daly, M. (1985). Competitiveness, risk-taking, and violence: The young male syndrome. *Ethology and Sociobiology*, *6*, 59-73.

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