C20

CHAPTER

20

Mate Guarding

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Abstract

Mate guarding includes behaviors that function to reduce the likelihood of a partner's defection from an ongoing long-term relationship. Some mate-guarding behaviors function by enticing a current partner's continued investment in the relationship through the provision of gifts or other benefits. Other mate-guarding behaviors function by removing a partner's alternatives to the ongoing relationship through subjugation or violence and the infliction of costs sufficient to remove a partner's ability to defect from the relationship. Mate-guarding behaviors represent evolved responses to the costs of losing a long-term partner. However, as the potential benefits of relationship defection persist despite a partner's guarding, there is an arms race between attempts to maintain the opportunities afforded by extra-pair relationships and a partner's attempts to thwart those opportunities and avoid the costs of that defection.

Key Words: mate guarding, mate retention, mating strategies, relationship dissolution, relationship defection

C20.P1 Mate-guarding behaviors are intended to thwart an intimate partner's defection from a long-term relationship. Mate-guarding behaviors are produced by adaptations that evolved as a consequence of sexual conflict associated with the costs and benefits of humans' pursuit of two distinct mating strategies. As a socially monogamous species, humans can and do employ both short-term and long-term mating strategies, with motivations encouraging one strategy or the other being moderated by a range of individual difference and circumstantial variables (Buss, 2006). Perhaps most influential in the selection of a mating strategy is the quantity of obligate parental investment, which is profoundly sexually dimorphic in humans and many other species (Trivers, 1972). That is, to successfully reproduce, females more than males are burdened with the heavy costs of gestation, birth, and lactation, and the limitations these costs impose on potential alternative mating opportunities. Consequently, females are often disproportionately motivated to pursue a long-term strategy in which sexual access is granted primarily to those males who are willing and able to commit to and invest in her and any offspring she produces.

C20.P2 Unlike females, males are not particularly limited by their own reproductive biology. Sperm are metabolically inexpensive (Hayward & Gillooly, 2011) and a male's minimum parental investment can end with the comparatively minuscule amount of energy (Frappier et al., 2013) required to place sperm in a female's reproductive tract. And as this leaves males free to immediately pursue additional mating opportunities, males are less motivated to restrict their mating behaviors to the confines of a long-term strategy. However, that a male is motivated to pursue a short-term strategy does not guarantee that he will be successful in finding females with which to pursue such a strategy. As females are more likely to restrict sexual access to long-term partners, males can often gain sexual access to a partner, particularly one of comparatively high value, who would not otherwise proffer it by agreeing to the confines of a long-term mating strategy. A long-term strategy can also increase males' paternity certainty and overall reproductive success, in addition to providing an avenue for increased social status and alliance formation (Buss, 2019). In other words, albeit for different reasons, both males and females can benefit from a long-term mating strategy.

C20.P3 This is not to suggest that a long-term strategy is necessarily the more valuable strategy for human mating. Both females and males can benefit from engaging in a short-term strategy—either instead of or in addition to a long-term strategy—under particular contexts and circumstances. For males, the "right" circumstance is often simply one of opportunity. Males who can engage in a short-term strategy are likely to do so (Clark & Hatfield, 1989; Schützwohl et al., 2009). Females, on the other hand, pursue a short-term strategy only when the potential partner is of particularly high mate value (Schützwohl et al., 2009), thus rendering the high potential costs of reproduction worthwhile.

C20.P4 Ultimately, there are potential benefits to both males and females for pursuing either a short-term mating strategy or a long-term mating strategy. These benefits, however, are not mutually exclusive. One can gain the benefits of a long-term strategy while simultaneously pursuing the benefits gained by a short-term strategy. That is, people may supplement their long-term relationships with short-term extra-pair partnerships (Buss & Shackelford, 1997b; Shackelford et al., 2008; Starratt et al., 2017). For males, this supplementation can result in access to a greater number of sexual partners, which can increase males' total reproductive success. For females, extra-pair partnerships may provide two benefits. For one, as females choose as extra-pair partners specifically those males who are of higher genetic value than their current long-term partner (Gangestad & Simpson, 2000; Scheib, 2001), they may secure social and material resources from a long-term partner while securing "better" genes from a different short-term partner. A second potential benefit of an extra-pair partnership for females is the opportunity to trade-up or switch mates (Buss et al., 2017; Drigotas & Barta, 2001), whereby an extra-pair partnership may lead to dissolution of the current long-term relationship in favor of a new long-term relationship with the higher value "previously extra-pair but now current" long-term partner.

This is more likely to occur when a woman is of higher mate value than her original long-term-partner (Moran et al., 2017).

C20.P5 As there are benefits to engaging in a long-term mating strategy and benefits to straying from that long-term relationship, people who engage in a long-term mating strategy are at risk of their partners' defection. Consequently, males and females have evolved motivations to engage in an array of mate-guarding behaviors as an evolved response to the potential costs of a partner's defection from a long-term relationship.

C20.S1 ## Mate-Guarding Function and Form

C20.P6 Mate-guarding behaviors include those behaviors that function to reduce the likelihood of a partner's defection from the current long-term relationship (Buss & Shackelford, 1997a). Although there are many different specific behaviors that function to guard a mate, they can be divided into two broad categories: benefit-provisioning behaviors and cost-inflicting behaviors (Miner et al., 2009).

C20.P7 Benefit-provisioning mate-guarding behaviors function by enticing a partner's continued investment in the long-term relationship. Some of these benefit-provisioning mate-guarding behaviors accomplish this by increasing relationship satisfaction, which can be a valuable defection deterrent as indicated by the negative correlation between relationship satisfaction and likelihood of relationship defection (Mark et al., 2011; Shackelford et al., 2008). The more satisfying one finds a current relationship to be, the less likely one is to seek out alternatives to that relationship. The ways in which one might increase a partner's relationship satisfaction vary and can include behaviors such as promoting oneself as a supportive and empathetic partner (Cramer & Jowett, 2010) to behaviors that bestow sexual benefits, such as performing oral sex on a partner (Pham & Shackelford, 2013; Sela et al., 2015). Regardless of the mode or method of benefit bestowal, a partner who is satisfied in the current relationship is a partner who is less likely to defect from that relationship.

C20.P8 Other benefit-provisioning mate-guarding behaviors function by highlighting or increasing one's own value as a mate. This can be an effective defection deterrent given that people may be less likely to risk losing a partner they perceive to be particularly attractive or valuable (Starratt et al., 2017). Again, the ways in which one can attempt to increase value or attractiveness as a mate vary and differ by sex. For example, men may find particular value in increasing their perceived attractiveness through display of wealth (Wang et al., 2018) or generosity (Van Vugt & Iredale, 2013). The accumulation of resources and the willingness to invest those resources in a partner are high mate value traits in men (Buss, 1989), and men with these traits are perceived to be more attractive and, therefore, may be less likely to suffer a partner's defection. Women, on the other hand, may be better served by enhancing their physical appearance. These enhancements could be temporary and superficial, such as accomplished through choice of clothing (Elliot & Niesta, 2008), or more drastic and long-lasting, such as accomplished by cosmetic surgery (Atari et al., 2017). Whatever the method of appearance enhancement, however, the consequence in

terms of mate guarding is the same—reducing a partner's likelihood of defecting from the relationship by making oneself too attractive to risk losing.

C20.P9 On the opposite end of the mate-guarding spectrum are cost-inflicting mate-guarding behaviors. This class of behaviors function not by enticing a partner's continued investment but by reducing a partner's actual or perceived alternative mating opportunities or by punishing or threatening to punish a partner's defection from the current long-term relationship. Some of these cost-inflicting behaviors are relatively mild, such as engaging in deceptively affectionate behaviors in which the level of affection demonstrated exceeds the actual level of affection (Caton & Horan, 2019). Although not imposing a direct cost, deceptive affection can dissuade an individual from recognizing the risks of continuing to invest in a relationship in which they are more invested than their partner.

C20.P10 Another class of cost-inflicting mate-guarding behaviors includes partner-directed insults (McKibbin et al., 2007; Starratt et al., 2008). It may seem counterintuitive to attempt to retain a partner by insulting them. However, insulting a partner serves the purpose of reducing that partner's perception of their own value. By reducing a partner's perceived mate value, one is effectively reducing that individual's perceived alternatives to the current relationship. For example, some partner-directed insults include derogations of a partner's physical attractiveness or derogations of a partner's value as a person or partner (Goetz et al., 2006). If such derogations were accurate, they would indicate that the individual is of quite low value as a partner. As a person of such apparently low value is unlikely to be able to successfully entice anyone else into a relationship, there would be no reason to risk leaving the current relationship. Thus, one could effectively guard against a partner's defection by insulting that partner into believing that no one else would have them and so their only course of action is to remain invested in the current relationship, provided that the partner's self-perception was not protected from devaluation by competing bolstering from elsewhere.

C20.P11 In addition to reducing the perceived available alternatives to the current relationship, one might also effectively reduce the number of actual opportunities a partner would have to defect from the current relationship. This could be accomplished through either direct guarding or competitor derogation and violence against rivals (Buss & Shackelford, 1997a). That is, a person could guard their mate simply by cloistering them from potential alternative mates, such as by refusing to allow them to be in the physical presence of other people at parties or other social events. Alternatively, an individual could focus their attention on the intrasexual rival, and engage in or threaten violence against a person who might provide a partner with an alternative mating opportunity. If one's partner is not permitted to be around other people, or if those other people are effectively dissuaded from perceiving one's partner as a potential target for poaching (Starratt & Shackelford, 2010), a partner's alternatives to the current relationship are functionally diminished and the risk of defection is reduced.

C20.P12 Sometimes, aggressive and violent cost-inflicting mate-guarding behaviors are directed not toward one's rival but toward one's partner. (Goetz et al., 2008). In fact, it has been argued that female-directed intimate partner violence functions as a cost-inflicting mate-guarding behavior by punishing or threatening to punish a partner's potential defection (Buss & Duntley, 2011; Kaighobadi et al., 2008; Shackelford et al., 2005). That is, a person who is threatened or physically assaulted for talking to, looking at, or even ostensibly thinking about someone other than their current partner may be less likely to successfully defect from the current relationship. It is worth noting that, odious as these cost-inflicting behaviors may be, similar types of mate-guarding techniques are common across many species, from some of humans' closest relatives, like chimpanzees (Watts, 1998), to more distant cousins, such as the fruit fly (Baxter et al., 2015).

C20.S2 ## When Do People Mate Guard?

C20.P13 Of course, functional though the behaviors may be, not all people engage in mate guarding at all times. The extent to which people engage in mate guarding is moderated by a range of individual differences and circumstantial variables. Generally, though, for both men and women, motivation to engage in mate guarding is greatest when the stakes are highest. That is, people are more likely to deploy mate-guarding behaviors when the risk of mate defection is higher and when the cost of losing that mate is higher.

C20.P14 For men, many of these cost-inflicting mate-guarding behaviors are inextricably linked to the relationship between a female partner's brief relationship defection and the risk of sperm competition and cuckoldry (Shackelford et al., 2006; Shackelford et al., 2007). As cuckoldry has been a recurrent adaptive problem for men, men have evolved a host of anti-cuckoldry tactics, which include mate-guarding behaviors (Goetz et al., 2007; Shackelford & Goetz, 2007). Consequently, males' likelihood of deploying mate-guarding behaviors is positively associated with the risk of partner infidelity and cuckoldry. This pattern persists when assessing risk of partner infidelity and cuckoldry in terms of increased extra-pair opportunity given time spent apart from one's partner (Starratt et al., 2007), increased fertility due to ovulatory status (Gangestad et al., 2002; Pillsworth & Haselton, 2006), lower levels of relationship commitment (French et al., 2017), or even increased perceived female sexual receptivity as suggested by her clothing choice (Prokop & Pazda, 2016). In short, as the possibilities that a female partner has been presented with or taken advantage of an extra-pair mating opportunity and become pregnant by such opportunity increase, the likelihood of her partner deploying in mate-guarding behaviors also increases.

C20.P15 Risk of partner defection is influenced not only by the states, traits, and behaviors of one's partner but also by the presence and quality of one's partner's potential alternatives to the current relationship. For example, women who are fertile and perceive their current long-term male partners to be less sexually attractive are more interested in engaging in extrapair sexual behavior (Buss et al., 2017) and are consequently more likely to be the targets of benefit- provisioning mate-retention behaviors from their long-term partners

(Pillsworth & Haselton, 2006). Similarly, a woman is more likely to guard her male partner when the pair is around other fertile females (Hurst et al., 2017). This is likely because although women are more likely to engage in extra-pair partnerships which could result in "trading up," men are more likely to engage in an infidelity when provided the opportunity (Starratt et al., 2017), and the presence of fertile women indicates extra-pair opportunity for men. In either case, however, as the apparent availability of extra-pair partnerships increases, so too does a partner's deployment of mate-guarding behaviors.

C20.P16 Just as a partner's apparent extra-pair opportunities affects one's engagement in mate-guarding behavior, one's own opportunities are similarly influential. The difference is that one's engagement in mate guarding is increased by an increase in one's partner's available alternatives, but it is similarly increased by a *decrease* in one's own available alternatives. That is, one is more likely to guard against losing a partner when there are fewer opportunities to secure alternative partners. If it does not appear that alternatives abound for oneself, more effort is devoted to maintaining a current partner's investment in the ongoing relationship, which translates to an increase in the performance of mate-guarding behaviors (Arnocky et al., 2014).

C20.S3 **Who Is More Likely to Mate Guard?**

C20.P17 Although there are certain circumstances in which people are more likely to engage in mate guarding, there are also some people who are more likely to deploy mate-guarding behaviors than are other people. Some people are unlikely to deploy any mate-guarding behaviors, while other people deploy mate-guarding behaviors judiciously such that they favor the provision of benefits over the inflicting of costs, and still others engage in both benefit-provisioning and cost-inflicting mate-guarding behaviors (Lopes & Shackelford, 2019). The individual difference variables associated with an increased likelihood of engaging in mate-guarding behaviors are those that are associated with an increased cost of a partner's defection and thus an increased advantage to guarding that partner.

C20.P18 For example, people who share biological children with their long-term partner are more likely to guard that partner than are people who do not share children with their long-term partner (Barbaro et al., 2016). Given the value of biparental care and the associated greater costs of losing the partner with whom one shares offspring and parental duties, the motivation to guard against that loss is comparatively high. The cost of the loss of a partner is also high when that partner is of high mate value. Consequently, there is also an increase in mate-guarding behaviors, particularly benefit-provisioning mate-guarding behaviors, by men whose partners are of comparatively high value (Starratt & Shackelford, 2012). This positive relationship between benefit-provisioning mate guarding and mate value extends to own value in addition to a partner's value. That is, there is a relative increase in the deployment of benefit-provisioning mate-guarding behaviors by men who themselves are of relatively high mate value (Miner et al., 2009a; Miner et al., 2009b). The source of this particular relationship between mate value and mate guarding

may be twofold. First, benefit-provisioning mate-guarding behaviors are likely to be less risky than cost-inflicting mate-guarding behaviors in that they are more likely to evoke positive rather than negative regard. Second, a person who is of high value may be in a better position to be able to afford the material or psychosocial costs of provisioning their partner with benefits.

C20.P19 The flip side of higher value males' deployment of benefit-provisioning mate-guarding behaviors is lower mate value males' deployment of cost-inflicting mate-guarding behaviors (Daly & Wilson, 1988; Miner et al., 2009b). This, however, is not the only individual difference trait associated with deployment of cost-inflicting mate-guarding behaviors. For example, individuals who score higher on Machiavellianism, a trait associated with a willingness to manipulate others for personal gain, are more likely to engage in a range of cost-inflicting mate-guarding behaviors. This includes behaviors directed at one's partner—such as those that reduce a partner's access to potential alternative mates—as well as behaviors directed at rivals who might tempt a partner to defect from the ongoing long-term relationship (Brewer & Abell, 2015).

C20.P20 There is even emerging evidence linking individual differences in the deployment of mate-guarding behaviors to the physiological mechanisms underlying the motivations to engage in such behavior. For example, individual differences in copy number variations of the androgen receptor gene, which influences the phenotypic effects of androgens, has been associated with individual differences in responses to a partner's potential relationship defection (Lewis et al,, 2016). Specifically, longer versions of the androgen receptor gene have been associated with greater sexual jealousy and greater attention to and motivation to "correct" partner infidelity. While the nature of the gene-behavior relationship is not yet clear, the relationship is consistent with existing behavioral and psychosocial evidence, particularly given that such longer versions of the androgen receptor gene are associated with reduced phenotypic masculinization and, consequently, less of those traits that women find attractive in a mate, including upper body strength and social prestige (Simmons & Roney, 2011). In other words, men with longer androgen receptor gene alleles are less masculine, have physical and psychosocial traits associated with lower mate value, and have cognitive tendencies that make them more prone to engage in mate guarding behaviors.

C20.S4 **Resistance to Mate Guarding**

C20.P21 Although mate guarding evolved to address the adaptive problem of a partner's defection from a long-term relationship, the existence of a partner's mate guarding does not summarily extinguish the potential value of the defection from which the partner guards themselves. Even with the potential negative consequences of a partner's guarding behavior, there exist the potential benefits of defection. Consequently, people may be motivated to resist a partner's mate-guarding efforts (Cousins et al., 2015). This arms race between a person's motivation to engage in extra-pair mating and a partner's motivation to deploy

mate-guarding behaviors is evident in the fact that the same circumstances are linked to an increase in both the need for mate guarding and the need to resist mate guarding. The same variables associated with an increase in mate guarding appear to be associated with an increase in resistance to that guarding, at least among women. This is not to suggest that men do not similarly resist a partner's guarding attempts, which they likely do, but to the best of our knowledge current evidence seems restricted to research on women's resistance efforts.

C20.P22 Just as a person is most likely to engage in mate guarding when their partner's extra-pair mating opportunities are relatively abundant, that partner is more likely to resist mate guarding when retaining access to extra-pair mating opportunities is comparatively high. Specifically, for example, women who perceive themselves to be more attractive than their partner are more likely to engage in resistance to mate-guarding behaviors (Fugere et al., 2015). This is because a woman who is more attractive than her partner and allows herself to be successfully guarded against defection effectively loses any potential opportunity to trade up and leave her current partner in favor of a new partner of higher value. Resisting a partner's mate-guarding behaviors, then, may help to preserve those trade-up opportunities.

C20.P23 Trading up is not the only potential benefit of defection, however, and so is not the only time when resistance to mate-guarding behaviors is greater. Women can benefit from defection by supplementing the material resources they get from a long-term partner with genetic resources from an extra-pair partner. Consequently, women may benefit from maintaining extra-pair opportunities when they are most fertile and, therefore, engage in greater resistance to a partner's mate-guarding behaviors when they are most fertile (Gangestad et al., 2014).

C20.P24 Additionally, just as one who scores high on Machiavellianism is more likely to deploy mate-guarding behaviors, one who scores high on Machiavellianism is similarly likely to engage in resistance to a partner's mate-guarding behaviors, thus retaining access to potentially beneficial alternative mates (Abell & Brewer, 2016). This relationship between Machiavellianism and mate guarding highlights the functions of mate guarding and the resistance to mate guarding. People are motivated to engage in behaviors that are most beneficial to themselves—such as maintaining the ability to secure the advantages of both a long-term mating strategy and a short-term mating strategy simultaneously—while preventing their own partner from doing the same.

C20.P25 The Evolution of Mate GuardingAs a socially monogamous species, humans have evolved motivations to pursue both a long-term mating strategy and a short-term mating strategy under the right conditions. This creates conflict, in which the value to a person of defecting from a long-term relationship—either briefly or completely—is detrimental to that person's long-term partner. Therefore, people have evolved motivations to engage in mate-guarding behaviors. Although varying widely, mate-guarding behaviors can be categorized as benefit provisioning or cost inflicting, with the former functioning by

enticing a partner's continued investment in the current relationship and the latter functioning by reducing a partner's actual or perceived alternatives to the current relationship or punishing or threatening to punish a partner for failure to maintain investment in the current relationship. Of course, as mating opportunities outside the long-term relationship continue to be potentially valuable, people have evolved motivations to resist a partner's mate-guarding attempts. However, people do not indiscriminately deploy mate-guarding behaviors or resistance to mate-guarding behaviors. Instead, the likelihood of engaging in mate-guarding behaviors increases with the risks and consequences of a partner's relationship defection, whereas the likelihood of engaging in resistance to a partner's mate guarding increases with the value of maintaining an alternative mating strategy for oneself.

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