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## Intrasexual Rivalry Among Women

Steven Arnocky  
Nipissing University, North Bay, Canada

### Synonyms

[Intrasexual competition](#); [Intrasexual selection](#);  
[Within-sex competition](#); [Within-sex selection](#)

### Definition

Intrasexual rivalry is a driving force behind sexual selection. Women's intrasexual rivalry surrounds competition over reproductive opportunities and resources.

### Introduction

Humans are among the less than 5 % of mammals that engage in biparental care. Men who invest resources toward mates and offspring are compelled to be more selective in their mate choice. Because men vary widely in their investment and in their overall value as a mate, women can benefit their reproductive fitness by outcompeting intrasexual rivals for the best mates. Yet because women must also remain alive to rear offspring, adaptations for same-sex rivalry are characteristically different in many ways from male

competitive adaptations. Women are less likely to rely on violent and physically risky strategies. More surreptitious forms of competition by means of verbal derogation and indirect aggression are considered as evolved mechanisms for defeating same-sex rivals. Competition among women varies depending upon contextual factors such as mating systems and the number of mates available in the environment.

In terrestrial mammals, including humans, sex differences in obligatory parental investment are a strong predictor of sexually dimorphic phenotypes associated with intrasexual rivalry. In the vast majority of species, female parental investment is much greater than that of males, conferring males with increased yet more variable reproductive potential and females with a heightened impetus to be more selective with whom they mate. From this perspective, females benefit primarily from selecting among the most desirable and competitively efficacious males, given that their reproductive output (in terms of number of offspring produced) will remain relatively stable, whereas males who are best adapted to attract or otherwise obtain females and/or to defeat same-sex rivals for mating opportunities or relevant resources will pass on their genes with much greater frequency than those males who are less-well-suited to these tasks. Over generations, males take on the competitively adaptive heritable characteristics of their ancestors, which can include larger physical stature or weaponry for fighting as well as a more aggressive psychological and

behavioral disposition that is beneficial for quelling rival males. From this perspective, it has traditionally been assumed that intrasexual rivalry among females does not exist, or if it does, matters only to an extent that pales in comparison to what is seen among males. However, recent reformulated models of sexual selection have countered this view by considering intrasexual competition as centering upon more than mere access to mating opportunities but rather upon competition over any mating-relevant resources (Rosvall 2011). From this perspective, research has shown that female intrasexual rivalry (1) exists in many diverse species and (2) has evolved to solve a wide variety of mating-relevant adaptive problems, including accessing food, nesting sites, social status, and, in species characterized by biparental care, male investment. Rosvall (2011) noted that although females sometimes compete for number of mates, more often they compete for male provisioning of direct or indirect (i.e., genetic) benefits. Ultimately, intrasexual competition among females for such resources can have a meaningful impact upon reproductive success. In some primates, for instance, high ranking females produce more surviving offspring and daughters that reach sexual maturity earlier, whereas females who fall victim to intrasexual harassment can suffer dire consequences, such as spontaneous abortion of pregnancies in some primates (see Arnocky and Vaillancourt 2014; Rosvall 2011 for review).

Humans offer a unique model for the study of female intrasexual rivalry, given that we are among a minority of less than 5 % of mammalian species in which both sexes invest resources and parental care toward their offspring. Men's provisioning of parental care may offset the costs of monogamy by increasing the survival rate of offspring, and might also provide repeated sexual access to a partner, or deter against a partner's extra-pair copulations (see Arnocky and Vaillancourt 2014). Because men also invest considerable resources toward partners and offspring, they too are highly discriminating in their long-term mate choice (see Arnocky and Vaillancourt 2014). Moreover, not all men are equally desirable to women as long-term mates (whereby men's

ability to provide direct-benefits varies) or short-term mates (whereby men's ability to provide indirect/genetic-benefits varies). Differential mate-value among men equates to there being a limited supply of desirable men, for which women must compete. This competition is characterized by two interrelated phenomena: *intersexual selection*, which refers to the nonrandom choice of mating partners between the sexes (applied to sexual selection among women, this often entails the desire to alter one's physical appearances to appear more desirable to men), and *intrasexual selection*, which refers to the direct rivalry between members of one sex for reproductive resources or access to members of the other sex.

### Sex Differences in Physically Violent Competition

Women's direct intrasexual competition is characteristically different from that of men. From a fitness standpoint, women have more to lose, relative to men, from engaging in risky physical altercations characteristic of male intrasexual rivalry. Even though humans are considered a biparental species, women still provide most of the *obligatory* parental care required for offspring survival. Whereas ancestral men's inclusive fitness relied upon obtaining reproductive opportunities, women's relied more on their ability to rear offspring through early life stages (Campbell 2013). A mother's death is considerably more debilitating to a child's survival relative to a father's death (Sear et al. 2000). The costs associated with direct aggression and other risky forms of competition are therefore greater for women than for men, and women's intrasexual competition necessitates greater risk aversion (see Arnocky and Vaillancourt 2014; Campbell 2013 for review).

The greater cost associated with women's use of physically risky competition strategies is well exemplified by studies of sex differences in human physiology and aggression. First, although humans are much less sexually dimorphic in terms of their physical size (males are approximately 15 % larger than females) relative to some early hominin species, such as *Paranthropus robustus*, and other closely related primates (e.g.,

Lockwood et al. 2007), it is nevertheless evident that “sexual dimorphism and violent male-male competition are ancient and enduring elements of our human evolutionary history” (Daly and Wilson 1988, p. 143). These elements of our evolutionary past are readily observable in the sex-differentiated aggressive behaviors of contemporary hunter-gatherer and industrialized societies. Cross-culturally, women less often exhibit extreme forms of overt physical aggression, including interpersonal violence, homicide, and warfare, relative to men (e.g., Daly and Wilson 1988). These sex differences are evident from a very early age and may be mediated, in part, by differences in fear responses related to aggression, such that females are more likely to express fear within the context of physical danger. In support of this, a meta-analytic review of sex differences in aggression by Eagly and Steffen (1986) found that sex differences in aggression were larger when women perceived that their aggression would pose a danger to themselves. It is important to note here that women’s lesser involvement in direct physical aggression does not mean that they do not engage in such behaviors or that women’s physical aggression is somehow unrelated to intrasexual rivalry in the same manner as men’s aggression. Burbank (1987) conducted a cross-cultural survey of women’s aggression, which ranged between verbal and physical violence, and noted that such behaviors were (1) common (physical aggression by women was observed in 61 % of the cultures analyzed) and (2) most often directed at other women within the context of competition for mates or reproductively relevant resources (e.g., subsistence products). Reasons underlying young girls’ and adolescents’ reports of physical aggression also include fighting over access to boys as well as reputational defense, status enhancement, and avoidance of victimization (see Campbell 2013). However, in circumstances of girls’ and women’s intrasexual competition, physical aggression remains a much rarer exception relative to more common tactics of verbal derogation and indirect (social) aggression. Next, I describe women’s use of verbal derogation and indirect aggression situated within the context of competition over reproductively relevant

resources such as status and mates, as well as describe why these acts of aggression often focus on physical appearance and sexual reputation, and whether there are tangible mating-relevant outcomes for perpetrators and victims.

### **Verbal Derogation of Attractiveness, Promiscuity, and Other Components of Mate-Value**

Verbal derogation refers to negative statements that are made toward other individuals. Verbal derogation is a tactic used by both men and women in intrasexual rivalry. However, rival derogation often differs between the sexes in terms of content, such that same-sex rivals tend to derogate facets of others that are crucial to mate-value or desirability to the opposite sex. For instance, Buss and Dedden (1990) showed that women, more than men, reported derogating the physical attractiveness of a rival, calling a competitor promiscuous, and suggesting that other women fail to provide reproductive value through intercourse (i.e., calling other women a “tease”). Similarly, Campbell (2013) noted continuity in the epithets which frequently appear in recounts of girls’ fights with other girls, which include verbal barbs such as “slag,” “slut,” “whore (ho),” “tart,” “ugly,” and “fat.” Targeting these aspects of a girl’s or woman’s mate-value directly counters boy’s/men’s preference for mates who best display various physical cues to health and fertility, such as feminine and symmetrical facial features, a low waist-to-hip ratio, clear skin, and lustrous hair (see Arnocky et al. 2014a for review), as well as mates who are sexually accessible (especially in short-term mating where conservative or low sex-drive women may be disfavored), yet who are simultaneously faithful (especially in long-term mating) in order to counter paternity uncertainty (Buss and Schmitt 1993).

Individual differences in the use of such derogation strategies exist, with women who express a more unrestricted sociosexuality being more likely to disparage other women. For example, Bleske-Rechek and Buss (2006) found that an unrestricted sociosexual strategy among both men and women was associated with more frequent use of dominance displays, derogating a

rival's physical appearance and popularity, and attempting to dominate competitors. The sexuality of the *target* might also influence the extent to which women are derogated by other women. Grabe et al. (2012) exposed women to clips of a news anchor who was either more sexualized (wearing a dark jacket and skirt that accented her waist-to-hip ratio, bright red lipstick, and a necklace) or less sexualized (wearing a shapeless dark blue jacket and skirt that deemphasized her waistline and no lip color or jewelry). The researchers found that women who were exposed to a sexualized woman news anchor derogated her appearance efforts ("... her lipstick was too red, it was distracting" or her "outfit was terrible for her body"), her agreeableness ("self-centered"), contentiousness ("she stood awkwardly"), emotional stability ("tense and fidgety"), and intelligence ("stupid" and "dumb") more than women exposed to a less sexualized woman news anchor.

Similarly, Vaillancourt and Sharma (2011) showed that almost all women who were randomly exposed to an attractive female confederate (dressed provocatively) engaged in more derogatory behavior toward her relative to when she was dressed in more conservative clothing. Example statements given by the authors included women implying to another participant that the confederate was dressed as if she wanted to have sex with one of her professors or that her "boobs were about to pop out." One participant was reported to have looked the confederate up and down and to have said "what the fuck is that?" while exhibiting a disgust reaction. Moreover, women were less likely to want to introduce their boyfriends to the confederate, to have their boyfriends to spend time with the confederate, or to become friends with the confederate, when she was provocatively versus conservatively dressed.

Ultimately, verbal derogation can have an important and reproductively relevant influence upon the target. Fisher and Cox (2009) showed that relative to men's initial attractiveness ratings of women's faces, receiving subsequent negative derogatory statements about those faces from a woman who they viewed as attractive significantly reduced their perceptions of the target woman's attractiveness. Derogatory statements

made by attractive women were much more impactful than derogatory statements made by an unattractive woman. However, direct verbal derogation tactics can also be damaging to the perpetrator. Fisher and colleagues (2010) examined men's and women's perceptions of women who were purported to have made a derogatory statement about another woman's appearance, personality, or sexuality. Their results showed that men significantly decreased their evaluations of the derogator's friendliness, kindness, trustworthiness, and overall desirability as a mate, relative to when their photos were presented without having made a derogatory comment. Women also rated derogators more negatively along the same dimensions and also decreased their views of the derogator's fitness as a parent and her physical attractiveness, and in the case of appearance derogations, her promiscuity, relative to when the photos were presented as not having made derogatory comments.

Together, these findings suggest that making direct derogatory comments about intrasexual rivals, such as "She's pretty but... She wears a lot of makeup and wears padded, pushup bras all the time (even to the gym!)...." or "I know her really well. She's a virgin and is holding out until she's married..." (Fisher et al. 2010, p. 269) can have negative effects upon the target but also upon the perpetrator's attractiveness to men and appeal as a same-sex ally. This body of research suggests that while verbal derogation is an effective strategy for disparaging rivals, it is also risky, and thus women may sometimes rely on more surreptitious acts of aggression meant to damage same-sex rivals.

### **Indirect (Also "Social" and "Relational") Aggression**

Beyond the study of direct verbal derogation tactics, researchers have also examined a related but conceptually distinct phenomenon termed indirect aggression (otherwise termed "social" or "relational" aggression; although see Ingram 2014 for some conceptual differences between constructs). Research has shown that women are much more likely to use indirect aggression relative to physical aggression, which involves purposefully and

often covertly manipulating interpersonal relationships through acts of social exclusion, veiled criticism, breaking confidences, gossip, and rumor spreading in order to harm others, which relative to physical violence confers a lower likelihood of retaliation, physical, social, or legal consequence (see Arnocky and Vaillancourt 2014 for review). Studies of sex differences in indirect aggression have shown that women are often equally or more likely than men to use indirect aggressive tactics (see Hess and Hagen 2006). Recent evidence suggests that women, more than men, preferentially remember gossip about a potential rival's physical attractiveness rather than their wealth (De Backer et al. 2007). Beyond a focus on physical attractiveness, women's indirect aggression is also intimately tied to sexuality reputation. Leenaars et al. (2008) showed that among older adolescents, recent sexual behavior correlated with increased risk for indirect victimization, suggesting that indirect aggression might also be used to regulate sexuality among the peer group (see Vaillancourt 2013). Indirect aggression seems to be motivated by mating and status goals. Griskevicius and colleagues (2009) primed men and women with status and courtship motives and subsequently assessed willingness to aggress directly and indirectly against a same-sex rival. For women, results showed that both status and courtship motives increased willingness to engage in indirect aggression (e.g., socially excluding a rival). Moreover, when women were primed with competition over scarce resources, they became more willing to aggress directly against a same-sex rival.

The use of indirect aggression is functional as a competitive tactic for at least three interrelated reasons: First, it is damaging to targets and has been shown to promote depression, lower self-esteem, school drop-out, and even suicide among victims (see Vaillancourt 2013 for review). Second, indirect aggression has been linked to increased status (in terms of popularity and dominance, although not likeability or preference) within the social hierarchy (see Ingram 2014 for review). Third, indirect aggression has been related to mating success and victimization with

decreased mating success. For example, in a longitudinal study of adolescents, Arnocky and Vaillancourt (2012) explored whether various types of peer-aggression confer mating benefits to perpetrators. Results showed that peer-rated indirect aggression, but not physical aggression, predicted having a dating partner 1 year later, controlling for age, initial dating status, popularity, and physical attractiveness, whereas being a self-reported target of bullying negatively predicted having a dating partner at 1-year follow-up. Similarly, White et al. (2010) showed that women who reported more indirect aggression toward peers had earlier ages at first sexual intercourse, whereas women who were more victimized in adolescence experienced later ages at first sexual intercourse.

Arnocky et al. (2012) explored how individual differences in self-perceived mate-value (in this case, physical attractiveness compared to same-sex rivals) related to use of indirect aggression in a large sample of heterosexual women who were in dating relationships at the time. Results showed that women who believed they were of lower physical attractiveness relative to other women were more likely to perpetrate indirect aggression against peers. Moreover, women who perceived themselves as being more physically attractive than other women were more likely to also report being indirectly victimized by other women with greater frequency. Similarly, Leenaars et al. (2008) found that among adolescents, attractive females were at greater risk for indirect victimization. This makes sense in light of the fact that physically attractive women report greater success in stealing other women's romantic partners (Sunderani et al. 2013). Together, these findings suggest that women may preferentially target attractive women for indirect aggression.

### **Ovulatory Shifts in Women's Intrasexual Competition**

Females' intrasexual rivalry has been shown to intensify in relation to ovulatory shifts. Fisher (2004) examined whether women's evaluation of other women's attractiveness differed during ovulation (i.e., maximum fertility) versus during menstruation (i.e., minimal fertility). Results showed

that maximally fertile women rated other women's facial photos as being less attractive compared to menstruating women, ostensibly due to increased intrasexual competitiveness during the time when reproduction is most likely. Intrasexual competition during the follicular phase of the reproductive cycle has been shown to be related to hormonal functioning. Moreover, among normally ovulating women, increased conception risk is associated with women's greater dehumanization of other women (but not of men or of elderly women) and greater intrasexual competitiveness (Piccoli et al. 2013). Cashdan (2003) had female participants complete diary entries detailing competitive interactions and noted whether or not aggressive tactics were implemented. The researcher also obtained measures of total testosterone, free testosterone, androstenedione, estradiol, and cortisol in the follicular phase of the menstrual cycle. Results showed that women high in androstenedione (an androgenic steroid produced by the adrenals) were more likely than other women to express their competitive feelings through verbal aggression, whereas women with low androstenedione and total testosterone were less likely to express their competitive feelings overtly. Some research suggests that use of hormonal contraceptives lowers intrasexual competition among some women. Cobey et al. (2013) found that among pair-bonded (but not single) women, endorsement of a self-report scale for intrasexual competition declined during use of hormonal contraceptives relative to when they were regularly cycling at a fertile and a nonfertile cycle stage, even after controlling for age, relationship length, and satisfaction.

### **Influence of Mate Scarcity on Women's Intrasexual Rivalry**

Because competitor derogation, direct, and indirect aggression all require energies that might otherwise be spent on addressing other adaptive problems and because each of these tactics pose varying levels of risk, women would be expected to generally avoid their indiscriminate use but rather to rely upon environmental cues to their necessity. One such environmental cue which

might motivate greater use of competitor derogation and intrasexual aggression is the operational sex ratio – or the ratio of reproductively capable males to females in a given population. When potential mates are scarce relative to intrasexual rivals, women may be compelled to compete more vigorously for rarer mating resources and opportunities. In support of this, Arnocky et al. (2014b) primed participants with perceptions of either mate scarcity or abundance using bogus magazine articles and subsequently had them complete measures of intrasexual competitiveness as well as jealousy, direct, and indirect aggression toward a hypothetical mate-poacher. Results showed that women (and men) were more intrasexually competitive, more jealous, and more willing to use indirect aggression against a same-sex rival after being primed with mate scarcity.

### **Conclusion**

Women can benefit in multiple ways from successful intrasexual competition, including in securing and maintaining mating opportunities and social status (see Arnocky and Vaillancourt 2012), and this is consistent with recent studies of other species highlighting the importance of competition among females to reproductive success (see Rosvall 2011 for review). Given differential challenges faced by women relative to men, such as the need to remain alive in order to rear offspring, women's intrasexual rivalry is characteristically different from that of men. Women are less likely to perpetrate physical violence against other women. Women's intrasexually competitive tactics range from verbal derogation of rivals (often in reference to mate-value characteristics such as physical attractiveness and sexuality) to indirect aggression involving more discrete social manipulations, gossip, and exclusion. Use of these tactics can be effective in harming rivals and in facilitating mating success but also entail risks such as lower desirability to males or reduced likeability. Accordingly, the use of these tactics is not indiscriminate but rather is more likely under contextual pressures including during phases of the ovulatory cycle in which conception

is most likely or when mating opportunities are perceived to be scarce.

## Cross-References

- ▶ [Contexts for Women's Aggression Against Women](#)
- ▶ [Derogation of Attractiveness Among Women \(Intrasexual Rivalry\)](#)
- ▶ [Derogation of Promiscuity Among Women](#)
- ▶ [Enhancing Women's Competitiveness](#)
- ▶ [Gossip](#)
- ▶ [Gossip, Rumors, and Social Exclusion](#)
- ▶ [Indirect Aggression](#)
- ▶ [Intrasexual Rivalry Among Men](#)
- ▶ [Reproductive Potential](#)
- ▶ [Verbal Derogation Among Women](#)
- ▶ [Women's Intrasexual Rivalry in Urban Gangs](#)

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