

## The Development of Relational Aggression

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Print publication date: 2018

Print ISBN-13: 9780190491826

Published to Oxford Scholarship Online: May 2018

DOI: 10.1093/oso/9780190491826.001.0001

# An Evolutionary Psychological Perspective of Indirect Aggression in Girls and Women

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DOI:10.1093/oso/9780190491826.003.0008

### Abstract and Keywords

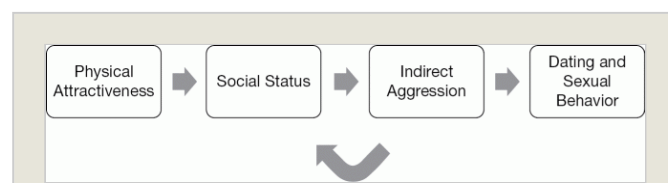
Although the effects of sexual selection on male mating competition and intrasexual aggression have been studied extensively for well over a century, female mating competition and intrasexual aggression have only begun to receive serious attention in recent decades. Here, we focus on one aspect of sexually selected competition in girls and women—rival derogation, which takes the form of indirect aggression. We argue that this tactic of intrasexual competition both reduces a rival's ability to compete for desirable mates and helps aggressors achieve and maintain their own high social status. We further argue that physical attractiveness initiates the pathway leading to high social status, which is preserved through the use of indirect aggression and is associated with increased dating and sexual behavior.

*Keywords:* indirect aggression, social aggression, relational aggression, gossip, competitor derogation, intrasexual competition, mating competition, sex differences, mate-value, female aggression

Darwin (1871) developed the theory of sexual selection to explain the existence of tools and tactics of male mating competition (e.g., ornaments, weaponry). However, it is now widely acknowledged that females also engage in mating competition, and that sexual selection has acted on females to produce tools and tactics likely to facilitate access to desirable mates and fitness relevant resources (e.g., Buss, 1995; Clutton-Brock, 2009; Shuker, 2010). In human females, sexual selection has given rise to two strategies—self-promotion and

the derogation of rivals. Self-promotion characteristically includes tactics such as wearing sexy clothing to attract the attention of a potential male sexual or romantic partner. The derogation of rivals characteristically includes tactics such as criticizing a same-sex rival's appearance, or spreading rumors (i.e., using indirect aggression) that suggest that the rival is promiscuous (Buss, 1988; Fisher & Cox, 2011; Krems, 2016). According to Vaillancourt (2005, 2013), the derogation of rivals takes the form of indirect aggression and is an intrasexual competition tactic that is used by girls and women to debase the mate-value of a competitor. *Mate-value* is defined as "the total sum of characteristics an individual possesses at a given moment and within a particular context that impacts on their ability to successfully find, attract, and retain a mate" (Fisher, Cox, Bennett, & Gavric, 2008, p. 157).

Evolutionary theory posits that traits that enhance the ability to access and retain high-quality mates are the traits that are sexually selected for, as accessing and retaining such mates can contribute directly and indirectly to one's fitness (Clutton-Brock, 2007; Darwin, 1859, 1871; see review by Rosvall, 2011). It logically follows that the use of self-promotion and rival derogation might augment females' ability to increase their fitness via accessing and retaining high-quality (p.112) mates. In this chapter, we argue that girls and women use indirect aggression to (1) reduce a rival's ability to compete, and (2) maintain their own high social status, which increases their own mate-value. The use of these tactics—debasement of a rival's ability to compete and augmenting one's mate-value—is in turn linked to reproductively relevant outcomes, such as dating and other sexual behavior. We also argue that physical attractiveness initiates the cascade between social status and indirect aggression, which in turn confers a dating advantage for these aggressive and attractive, high-status females (Figure 8.1). We focus on girls and women in this chapter because female-female competition is a neglected area of research (Arnocky & Vaillancourt, 2017) that has been treated historically as a non-adaptive byproduct of selection in males (Rosvall, 2011, p.1135). We also focus on girls and women because physical attractiveness, a central feature of our theory, is more strongly linked to mating success in females than in males (Arnocky & Vaillancourt, 2017). Before discussing indirect aggression as an intrasexual competition strategy, we first address why girls and women prefer indirect aggression to other types of aggression.



Indirect Aggression Is Females' Preferred Mode of Aggressing

Indirect aggression—also termed “social” or “relational” aggression—entails a range of behavior intended to cause harm. It tends to be circuitous and includes actions like getting others to dislike a person, excluding peers from the group, giving someone the “silent treatment,” spreading rumors, and using contemptuous body gestures and facial expressions (Vaillancourt, 2005, 2013). Many tactics of indirect aggression focus on weakening victims' social relationships, whereas direct tactics of aggression (e.g., verbal and physical aggression) focus on diminishing victims' status and causing them bodily harm. Although indirect aggression is also used by boys and men, it is the preferential mode of aggressing for girls and women (e.g., Benenson et al., 2013; Campbell, 2002; Österman et al., 1998). Indeed, while boys and men rely on a variety of aggression strategies to harm same-sex others, such as verbal and physical aggression (Archer, 2004; Card, Stucky, Sawalani, & Little, 2008), girls and women almost only use indirect aggression to harm others (Vaillancourt, 2005, 2013). For example, Salmivalli and Kaukiainen (2004) found in their study of 10-, 12-, and 14-year-olds that **(p.113)** boys were more indirectly and directly aggressive than girls on average; however, a group of highly indirectly aggressive adolescents was also identified, and this group was exclusively composed of girls. Similarly, Hess and Hagen (2006b) found that, compared to adult men, adult women reported being more likely to engage in indirect than direct tactics of aggression. In addition to relying primarily on indirect aggression to abuse others, females also report higher rates of indirect peer victimization than males (Bradshaw et al., 2015; Carbone-Lopez, Esbensen, & Brick, 2010; Crick & Bigbee, 1998). They also direct more of their aggression toward other females than toward males (Faris & Felmlee, 2011).

*Figure 8.1* Posited temporal pathway of intrasexual competition in girls and women.

Björkqvist (1994) has argued that girls' and women's proclivity for using indirect aggression rather than more direct means is due to the lower risk involved with this type of aggression. Indirect aggression permits girls and women to maximize the harm inflicted on others while minimizing their risk of personal danger (e.g., incurring revenge or third-party retaliation; Krems, 2017). Specifically, the perpetrator's risk is minimized because her identity is often unknown, which then avoids the potential for a counterattack or social condemnation (Campbell, 1999, 2002, 2004). Informed by the evolutionary meta-theory of obligate parental investment, whereby females are compelled to invest relatively more in any one offspring than are males (e.g., Trivers, 1972), Campbell (1999, 2002, 2004) has argued that females' greater parental investment makes direct aggression too costly, especially for mothers, who could be physically injured or even killed during an altercation. Historically, staying alive was more important to mothers than to fathers because offspring survival

has been inextricably linked to maternal survival (Hrdy, 1999; Sear & Mace, 2008).

### Indirect Aggression Reduces a Rival's Ability to Compete and the Rival's Mate-Value

Vaillancourt (2005, 2013) has suggested that indirect aggression is an effective intrasexual competition strategy used by girls and women because it reduces a rival's ability or willingness to compete. Specifically, she has argued that indirect aggression thwarts competitors by negatively affecting their health and well-being and by reducing their social standing in the peer group. This in turn is related to poorer "reproductive success" for targets of indirect aggression, which is indexed by less dating and sexual behavior.

It is well documented that being the target of peers' aggression is related to poorer concurrent and future health problems, such as depression, anxiety, low self-esteem, somatic complaints, and suicide for males and females (McDougall & Vaillancourt, 2015). There is also compelling evidence that girls and women have more pronounced negative reactions to being the target of indirect aggression than do boys and men (Benenson, Markovits, Hultgren, Nguyen, Bullock, & Wrangham, 2013; Kim, Koh, & Leventhal, 2005; Rueger, Malecki, & Demaray, 2011). For example, Klomek, Marrocco, Kleinman, Schonfeld, and Gould (2008) reported that, for adolescent girls, being the object of indirect aggression at any **(p.114)** frequency was associated with suicide attempts. However, for adolescent boys, only frequent indirect peer victimization was associated with suicide attempts. In another longitudinal study, of students in grades 6 to 9, Carbone-Lopez, Esbensen, and Brick (2010) reported that being the target of indirect bullying was associated with increased drug use among girls, but not among boys. Sullivan et al. (2006) also found that drug use was associated with being the victim of indirect aggression; this effect was stronger among eighth-grade girls than eighth-grade boys. In an intervention study of children assessed at age 10 and then again at age 13, reductions in depression and anxiety symptoms were found to be mediated by the reduction of indirect aggression victimization in girls, but not in boys. In a study of sixth- through twelfth-grade students, being the victim of cyber-bullying, a digital form of indirect aggression, was related to more self-reported symptoms of depression for girls, but not boys (Turner, Exum, Brame, & Holt, 2013). In their study of adolescents in grades 9 through 12, Bauman et al. (2013) found that depression mediated the relation between being the target of cyber-bullying and suicide attempts only for girls. And in a prospective study of students assessed twice in grade 8 and once in grade 9, Bond et al. (2001) found that being victimized by peers (e.g., being teased, having rumors spread about them, being deliberately excluded, or experiencing physical threats or violence) predicted higher symptoms of anxiety and depression in girls, but not in boys.

Fewer studies have examined the impact of being the target of indirect aggression in adulthood, and even fewer have examined the moderating role of gender. Hess and Hagen (2006a) theorize that, whereas reputation is an important factor in attracting both prospective mates and other allies, women's reputations are more prone to damage from gossip than men's are. For example, what men value in prospective female mates (e.g., fidelity) is more difficult to assess than what women value in prospective male mates (e.g., status, resources). Hence, the tactic of indirect aggression could more negatively affect women than men. The actual impact of reputational attacks on adult men and women, however, has yet to be measured. In nonhuman primates, victims of female intrasexual aggression are known to experience reproductive suppression; for instance, both harassment and direct physical aggression can inhibit reproduction through dysregulation of the hypothalamic-pituitary-gonadal axis (as reviewed in Stockley & Bro-Jørgensen, 2011). This relationship between being harassed by other females and one's reproductive potential remains largely under-studied in humans.

Still, there is some evidence to support the idea that indirect aggression negatively affects women more than men. Feinstein, Bhatia, and Davila (2013) examined the three-week prospective links between being the victim of cyber-aggression and depressive symptoms and rumination in a large sample of undergraduate students. Results indicated that cyber-victimization was associated with increases in rumination, which in turn was associated with more symptoms of depression in women, but not in men. Bennett, Guran, Ramos, and Margolin (2011) found that not only were women more distressed than men by being the target of electronic victimization, which included being excluded, but that there was also a positive association between being victimized by friends and dating **(p.115)** partners with increased alcohol and substance use for women, but not for men. Taken together, this research suggests that intrasexual aggression may be a particularly effective tool in women's mating competition.

The marked negative reaction by girls and women to being abused by their peers is also consistent with Taylor et al.'s (2000) "tend-and-befriend" hypothesis, which posits that females' biobehavioral response to stress does not involve fight-or-flight; but rather a pattern of "nurturant activities that are designed to protect the self and offspring that promote safety and reduce distress" (tending) and the "creation and maintenance of social networks that may aid in this process" (befriending; p. 411). Not belonging to a social network would jeopardize the safety and well-being of mothers and their children. Likewise, given that females have historically relied on male partners, kin, and, more recently, same-sex friends for access to life-sustaining resources, social exclusion may well have lethal consequences for women (e.g., Campbell, 2002). Furthermore, that females' intrasexual tactics of aggression typically focus on

severing rivals' social ties also underscores the importance of belonging for women (e.g., Campbell, 2002; Krems, 2017).

Belonging would be protected by avoiding conflict, especially with high-status females. This has been shown to be true for other female primates as well, who obtain advantageous reproductive output by virtue of their higher rank (see Clutton-Brock & Huchard, 2013; Sterck, Watts, & van Schaik, 1997, for reviews). For example, the social bonds of female baboons are related to enhanced infant survival (Silk, Alberts, & Altmann, 2003). The importance of maintaining social relationships for women may explain why they are better than men at detecting cues of social exclusion and show a more pronounced physiological reaction (e.g., increased heart rate) to cues of being rejected (Benenson et al., 2013). Women have also been shown to be biased to see anger in neutral female faces but not in neutral male faces—a bias that is especially acute for women who are frequently the targets of same-sex indirect aggression (i.e., physically attractive and sexually unrestricted women; Krems, Neuberg, Filip-Crawford, & Kenrick, 2015). There is also evidence to support that girls are more negatively affected by relationship losses than boys. In a large longitudinal cohort study of children aged 11 at time 1 and assessed again at age 13.5, Bakker et al. (2010) found that relationship loss was associated with more internalizing and externalizing problems in girls than in boys.

In addition to the mental health issues that result from poor peer treatment, being the victim of peer abuse is also associated with lower social status (de Bruyn, Cillessen, & Wissink, 2010; Vaillancourt, Hymel, & McDougall, 2003), which negatively impacts mate-value. The links between a male's social status and his sexual desirability have long been acknowledged, and recent work is beginning to show that this same link holds true for females. In a range of nonhuman animals, achieving higher status is linked to increased reproductive success for females (e.g., Clutton-Brock, 2009). In humans, several studies have shown that victims of peer aggression, including indirect aggression, have a later dating onset and have fewer dating partners than non-victimized peers (Arnocky & Vaillancourt, 2012; Gallup, O'Brien, & Wilson, 2011; Volk et al., 2015). Moreover, individuals (**p.116**) who are depressed are less likely to date (Pelkonen et al., 2008) and are more likely to report diminished sexual drive (Dryman & Eaton, 1991). In women, depression and anxiety have a notable impact on sexual desire, arousal, and functioning (Atlantis & Sullivan, 2012; Laurent & Simons, 2009). For instance, in one epidemiological study, women who were depressed were two times more likely to have sexual problems than women who were not depressed (Shifren, Monz, Russo, Segreti, & Johannes, 2008). Longitudinal studies suggest that the temporal precedence is from mood problems to poor sexual functioning and lower desire (e.g., Kalmbach, Pillai, Kingsberg, & Ciesla, 2015). By aggressing against their same-sex rivals, female

perpetrators might thus remove their rivals from the competition for desirable mates.

Indirect Aggression Is Used to Achieve and Maintain High Social Status  
Although studies consistently show that indirect aggression causes harm to targets of such abuse, there is also a strong body of research demonstrating that using indirect aggression is not necessarily problematic for perpetrators. In fact, indirect aggression is linked to high social status—in particular, peer-perceived popularity (e.g., Houser, Mayeux, & Cross, 2015; Juvonen, Wang, & Espinoza, 2013; Kraft & Mayeux, 2016; Prinstein & Cillessen, 2003; Vaillancourt & Hymel, 2006), which is linked to increases in dating and sexual behavior (Arnocky & Vaillancourt 2012; Gallup, O'Brien, & Wilson, 2011; Houser, Mayeux, & Cross, 2015; Pellegrini & Long, 2003). The link between indirect aggression use and peer-perceived popularity is especially pronounced for adolescent girls (e.g., Zwaan, Dijkstra, & Veenstra, 2013), who are at the peak of their reproductive value (Vaillancourt, 2013), the peak of their indirect aggression use (Archer, 2004; Massar et al., 2012), and the peak of wanting to be popular (LaFontana & Cillessen, 2010).

Research on the longitudinal associations between higher social status and indirect aggression suggests complex associations that require more investigation to understand the true temporal priority. Some researchers have shown that the temporal ordering between indirect aggression and peer perceived popularity is bidirectional (Rose, Swenson, & Waller, 2004) for girls, while other researchers have more consistently shown that popularity is related to *increases* in indirect aggression use (Faris & Felmlee, 2011; Prinstein & Cillessen, 2003), especially for girls (Cillessen & Mayeux, 2004).

In addition to this work on status and aggression, there are several studies documenting the potentially adaptive outcomes that are associated with using indirect aggression and holding high social status, such as increased dating popularity, desirability, and behavior, as well as increased sexual behavior (frequency and age at onset). Faris and Felmlee (2011) reported that among adolescents in grades 6 through 8, those who were involved in dating activities were “between 22 to 30% more aggressive than their peers who had never been on a date” (p. 59). Arnocky and Vaillancourt (2012) reported that for boys and girls, being nominated by peers (**p.117**) as indirectly aggressive predicted dating one year later, even when controlling for factors related to dating status such as peer-rated physical attractiveness, peer-perceived popularity, and earlier dating status. Gallup et al. (2011) also found that aggression was linked to adaptive dating outcomes for adolescent boys and girls: girls who reported having perpetrated high levels of indirect aggression in adolescence also reported that they began dating at an earlier age than their peers. Similarly, Pellegrini and Long (2003) found that dating popularity was related to indirect aggression, particularly for girls. Based on their findings, Pellegrini and Long

(2003) suggested that boys and girls use “different agonistic strategies in the service of dating”—boys use dominance, while girls use indirect aggression (p. 271). Additional research in this vein suggests that more aggressive girls are seen as more desirable dating partners by their male peers (Houser et al., 2015) and that already-desirable women (i.e., physically attractive adults) may be particularly effective intrasexual aggressors (Fisher & Cox, 2009).

Bullying perpetration, which includes the use of indirect aggression tactics, has also been linked to advantageous dating and sexual behavior. Connolly, Pepler, Craig, and Taradash (2000) were some of the first to link bullying perpetration to dating experiences in adolescents. In their study of students in fifth to eighth grades, they reported that, compared to peers not involved in bullying others, bullying perpetrators started dating at an earlier age and were involved in more “advanced dyadic dating.” In another study of adolescents and young adults, Volk, Dane, Marini, and Vaillancourt (2015) also found that bullying perpetration positively predicted dating behavior, as well as sexual experience. Likewise, Holt, Matjasko, Espelage, Reid, and Koenig (2013) found a positive relationship between bullying perpetration and sexual risk-taking behavior (i.e., more casual sex and sex under the influence of substances) in a sample of adolescents.

The research reviewed herein suggests that indirect aggression is used to maintain and improve peer-perceived popularity (Cillessen & Mayeux, 2004; Faris & Felmlee, 2011; Prinstein & Cillessen, 2003) and that indirect aggression and popularity are positively linked to dating behavior. Although no study to date has yet examined the true temporal sequence over an extended period of time, we hypothesize that these relationships are in fact initiated by physical attractiveness. Specifically, we hypothesize that, for girls and women, physical attractiveness leads to greater social status, which is maintained by being indirectly aggressive (Cillessen & Mayeux, 2004; Figure 8.1). High social status attained by possessing a trait highly valued by mates (e.g., attractiveness) is guarded with cruelty and impunity (Alcock, Solano, & Kayson, 1998; Vaillancourt, Hymel, & McDougall, 2003) and is linked to higher survival-related and reproductive resources (Hawley, 1999). This attractiveness-derived status is then maintained via indirect aggression, such as by using the social status one wields to effectively bar novel and potentially more attractive rivals from entering one’s established social circle (e.g., Benenson et al., 2013). Of course, it is possible that females achieve high social status in the absence of physical attractiveness, and thus similarly maintain and wield that status. At present, more research is needed to understand the temporal **(p.118)** links among attractiveness, social status, and indirect aggression. We review some existing work on these associations next.



### The Role of Physical Attractiveness in Social Status, Indirect Aggression, and Dating Behavior

Studies on mate preferences in humans have consistently shown that females prefer males who have high status, while males overwhelmingly prefer females who are physically attractive (Buss, 1989; Buss & Schmitt, 1993; Grammer & Thornhill, 1994; Symons, 1979). Indeed, physical attractiveness has been shown to strongly influence romantic attraction, with men preferring attractive mates more than women do (Feingold, 1990). Attractiveness has also shown to enhance mating success (Rhodes, Simmons, & Peters, 2005). Given its importance in human mate preferences, and considering Vaillancourt's (2005, 2013) hypothesis that indirect aggression is used as intrasexual competition strategy, the fact that physical attractiveness is also a key feature of aggression and social status should not be surprising.

However, research suggests two seemingly contradictory notions: more attractive girls and women receive disproportionate amounts of intrasexual aggression (e.g., Krems et al., 2015; Leenaars, Dane, & Marini, 2008; Vaillancourt & Sharma, 2011), and more attractive girls and women also perpetrate more intrasexual aggression. For example, Wyckoff and Kirkpatrick (2016) found that women, more than men, reported that they would use indirect aggression against a target described as high in mate-value than toward a target described as low in mate-value. Within the context of romantic and dating relationships, likewise, jealousy over other women's looks is known to spur indirect aggression toward them (e.g., Arnocky, Sunderani, Miller, & Vaillancourt, 2012; Owens, Shute, & Slee, 2000; Sharma & Vaillancourt, 2011). This may be particularly potent if a female partner suspects emotional, rather than sexual, infidelity by her partner, which signals loss of valued resources and their redirection toward potential interlopers (e.g., protection and parental resources; Davis, Vaillancourt, & Arnocky, 2016). To the extent that more attractive women are more threatening rivals in the competition for desirable mates, disproportionately aggressing toward these women would seem a logical strategy. But whereas previous victimization could spur preemptive aggression, it is equally likely that increased aggressiveness, which is associated with attractive females' attempting to maintain and consolidate their social status, invites aggression in return.

Although the chronological sequence remains unknown, several studies have documented that attractive youth are more popular and indirectly aggressive than are less attractive youth. For example, Vaillancourt and Hymel (2006) examined the moderating role of peer-valued characteristics, which included physical attractiveness, in the relationship between aggression and social status. Results indicated that peer-perceived popularity, power, and social preference were strongly **(p.119)** linked to physical and indirect aggression, as well as physical attractiveness, in adolescent boys and girls. Specifically, attractive, aggressive youth were perceived as more popular and powerful than their less

attractive, aggressive peers. For girls, the moderating effect of peer-valued characteristics was only supported for the indirect aggression–popularity link and not for the physical aggression–popularity link. For boys, peer-valued characteristics moderated the association between both forms of aggression and peer-perceived popularity. Similar findings from a range of studies also suggest links between high physical attractiveness, popularity, and increased aggressiveness (e.g., Borch, Hyde, & Cillessen, 2011; Dijkstra, Lindenberg, Verhulst, Ormel, & Veenstra, 2009; Faris & Felmlee, 2011; Nelson et al., 2017; Zwaan et al., 2013).

The targeting of a rival is especially effective if enacted by an attractive female. Fisher and Cox (2009) reported that when attractive women derogated the physical appearance of another woman, it influenced men's, but not women's, assessment of her attractiveness. In a study involving adolescents, popular teens were found to target other popular teens, as other popular teens would be truer rivals than would less popular teens (Closson & Hymel, 2016), which is consistent with Zwaan et al.'s (2013) findings. Prinstein and Cillessen (2003) similarly found that adolescents who were the victims of reputational attacks tended to be high in social status and suggested that "reputational aggression is targeted toward those with levels of status similar to the provocateurs" (p. 336). Faris (2012) reported that aggression directed toward aggressive, high-status peers was linked to gains in social status for perpetrators and a reduction in status for targets. High-status peers are indeed rivals because opposite-sex peers find them attractive. For example, Bower, Nishina, Witkow, and Bellmore (2015) found that among sixth-grade students, being perceived as popular by one's peers was associated with being considered romantically desirable by opposite-sex peers. Moreover, Smith, Rose, and Schwartz-Mette (2010) reported that for mid-adolescent girls, being indirectly aggressive predicted greater ratings of desirability by boys.

To the extent that gossip about other girls and women provides information about otherwise unknowable acts of aggression that may have been previously perpetrated, and other hard-to-assess information (e.g., another woman's promiscuity, the alliances between other women, the romantic attractions between others), girls and women might be more interested in this information. Indeed, research suggests that this seems to be the case (McAndrew, Bell, & Garcia, 2007). The importance of females' social connections further suggests that potentially hard-to-assess information about the genuine alliances between women would be important information to possess, as well as valuable information to trade. Given that attractiveness and popularity among women are also linked to network centrality, it is possible that popular girls might occupy social network positions that are advantageous in terms of gathering and also disseminating novel social information (e.g., Hess & Hagen, 2006a; Mouttapa,

Valente, Gallaher, Rohrbach, & Unger, 2004). If so, this would imply another means by which attractive women would be effective aggressors.

**(p.120) Conclusion**

In sum, our central thesis (Figure 8.1) is that when reproduction-linked competition begins to increase significantly in late childhood, more physically attractive girls are afforded greater popularity, owing to their desirability as prospective opposite-sex mates, as well as prospective same-sex friends. Any relative popularity may be advantageous (e.g., in terms of gaining access to resources and sexual partners), and it might also make any perpetrated aggression against same-sex rivals more effective. Evidence suggests that such indirect aggression among girls and women is in fact effective; compared to boys and men, female victims of same-sex indirect aggression are more likely to be deterred from engaging in mating competition via the increased depression and anxiety and high suicide rates that are associated with victimization. Hence, the social status that confers this greater aggression effectiveness is guarded and maintained, which is also likely to occur via indirect tactics of aggression among girls and women. Existing evidence suggests unequivocal links between physical attractiveness, high social status, and indirect aggression use in females—with further research independently linking each of these features with both the potential for increased reproductive success (e.g., access to more, and higher-quality, mates), as well as the potential to effectively reduce same-sex rivals' ability and willingness to engage in mating competition.

**Dedication**

This chapter is dedicated to Professor Anne Campbell, who passed away in 2017 after a brave battle with cancer. Dr. Campbell pioneered the study of girls' and women's aggression using an evolutionary framework. Her 1995 seminal paper titled "A Few Good Men: The Evolutionary Psychology of Female Adolescent Aggression" inspired many researchers, including myself, to study the evolutionary psychology of women. What struck me most about this paper was that Dr. Campbell directly challenged Darwin's (1871) focus on males in his theory of evolution by means of sexual selection.

Dr. Campbell leaves behind an impressive body of work spanning three decades, including her must-read book (2002, 2013) *A Mind of Her Own: The Evolutionary Psychology of Women*. The final paper Dr. Campbell sent me was one examining maternal competition in women, in which she found that 40% of women were angered or annoyed by mothers bragging about the achievements of their own children (Linney, Korologou-Linden, & Campbell, 2017). Despite this displeasure, very few mothers endorsed a direct hostile response. Many, however, endorsed managing competitive mothers by shunning them in conversations or rejecting their friendship (i.e., using indirect aggression). This novel research further promotes our understanding of female competition and highlights that girls and

women compete in a variety of different contexts, and that the form this competition most often takes is indirect aggression.

In one of our final communications, Dr. Campbell expressed her steadfast commitment to the advancement of science, knowing she was terminally ill. She wrote (p.121) to me saying, “Believe it or not, I am still churning stuff out.” Adding, “I don’t know how to stop doing what I have done for so long!” Our knowledge is richer because of her brilliance and devotion to this neglected area of inquiry.

—Tracy Vaillancourt

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