

An I³ Theory analysis of human sex differences in aggression

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Abstract: According to I³ Theory, individuals enact aggressive behaviors when (a) instigating triggers are severe, (b) impelling forces are strong, and/or (c) inhibiting forces are weak. Archer's analysis of human sex differences in aggression could be bolstered by a careful analysis of male-female discrepancies in reactivity (or exposure) to instigating triggers, proneness toward impelling forces, and/or proneness toward inhibiting forces.

Any comprehensive theory of human sex differences in aggression must accomplish the following three tasks (among others). First, it must establish the presence and magnitude of these sex differences. Second, it must discern which specific mediators (e.g., risk-taking, fear of danger) account for these differences. And third, it must identify the specific mechanism by which these mediators translate into behavior (e.g., by strengthening aggressive urges, by weakening the restraint of such urges).

Archer's impressive review, which does not purport to be a comprehensive theory of sex differences in aggression, focuses on the first and the second of these tasks. Regarding the first, relative to women, men are considerably more physically aggressive (in Archer's Table 2, average $d = .58$, range = .33–.91) and somewhat more verbally aggressive (average $d = .29$, range = .09–.55), although women are slightly more indirectly aggressive (average $d = -.16$, range = -.45–.05). Regarding the second, sex differences in aggression appear to be driven in large part by male-female discrepancies in factors such as risk-taking (men are higher) and fear of physical danger (women are higher).

We believe Archer's analysis could be bolstered by a careful analysis of the third task. According to I³ Theory (pronounced "I-Cubed Theory"), scholars can determine whether an individual will engage in aggressive behavior in a given situation by discerning the strength of the relevant instigating triggers, impelling forces, and inhibiting forces (Finkel 2007; 2008; Slotter & Finkel, in press). *Instigating triggers* refer to discrete, situational events or circumstances that induce rudimentary action tendencies toward physical aggression (e.g., provocation, goal obstruction, opportunities for personal gain). *Impelling forces* refer to the collective power of factors that increase the strength of individuals' tendencies to experience aggressive urges in response to an instigating trigger (e.g., high dispositional anger, elevated testosterone, previous exposure to violent media). Individuals tend to experience more powerful aggressive urges when impelling forces are strong than when they are weak, especially when instigating triggers are severe. *Inhibiting forces* refer to the collective power of factors that increase the strength of individuals' tendencies to override aggressive urges rather than acting upon them (e.g., high dispositional self-control, strong relationship commitment, sobriety). Inhibiting forces function as a threshold: Individuals will enact aggressive behavior only when aggressive urges are stronger than inhibiting forces.

Archer suggests that the tendency for males to be more aggressive than females is likely to be mediated by greater male risk-taking (for reproductive advantage) and greater female fear of physical danger. From the perspective of I³ Theory, the former could plausibly function as an impelling factor causing men to experience stronger aggressive urges than women because access to mates is so enticing, whereas the latter could plausibly function as an inhibiting factor causing women to experience stronger restraint of aggressive urges than men because of the elevated costs of acting upon these urges. If so, men are more aggressive than women because men experience both stronger impelling tendencies toward aggressive urges and weaker inhibiting tendencies to restrain these urges than women do. Establishing

definitively whether risk-taking is an impelling factor and whether fear of physical danger is an inhibiting factor, however, is an important direction for additional empirical research.

Regarding instigating triggers, Archer argues that the sexual selection analysis implies that the mechanism underlying sex differences in aggression "is unlikely to reside in a general sex difference in response to frustration or ease of arousal to anger" (sect. 2.1.2, para. 5). It is not immediately obvious to us why sexual selection would have built men to be (a) more (directly) aggressive than women while simultaneously (b) no more anger-prone in general or reactive to instigating triggers in particular. Many scholars argue that anger is an emotion that evolved in large part for its aggression-related consequences (e.g., Fischer & Roseman 2007; Frijda et al. 1989), so the disconnect between anger and aggression in Archer's model (implying that the link between anger and aggression differs for men and women) requires further elaboration.

The I³ Theory emphasis on instigating triggers, impelling forces, and inhibiting forces is also relevant to cases where male/female levels of aggression are comparable. One such instance is physical aggression in heterosexual romantic relationships. According to Archer's review, "there are no appreciable sex differences in physical aggression to opposite-sex partners, and therefore there is no need to look for ultimate explanations or for mediators" (sect. 4.4, para. 2). From the perspective of I³ Theory, this latter conclusion may be premature. It seems plausible that there could be ultimate explanations (and also proximal explanations) for sex differences in reactivity (or exposure) to instigating triggers, in the experience of impelling forces, and/or in the experience of inhibiting forces that trend in opposite directions and consequently neutralize one another. For example, perhaps sexual selection has caused men to experience stronger impelling tendencies to aggress physically toward an opposite-sex romantic partner (consistent with men's tendency to be more physically aggressive in general), but this effect is neutralized by stronger inhibiting tendencies for men to restrain these urges (particularly in cultural contexts where boys and men are socialized that it is inappropriate to be physically aggressive toward girls and women). Future research could productively explore whether sex-differentiated tendencies across the I³ Theory components could account for the lack of appreciable sex differences in the frequency of physical aggression toward opposite-sex partners.

In sum, although Archer's analysis of human sex differences in aggression is timely and valuable, it could benefit from greater elaboration of the psychological mechanisms driving these differences. Identifying mediators like risk-taking and fear of physical danger is a step in the right direction, but doing so does not establish whether the sex differences result from male-female discrepancies in reactivity (or exposure) to instigating triggers, proneness toward impelling forces, and/or proneness toward inhibiting forces.

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Biophobia breeds unparsimonious exceptionalism

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Abstract: With respect to aggressiveness it is not enough to say that humans are "like other mammals." We resemble only those species