Integrating approaches requires more than a division of labour: Commentary on Wölfer & Hewstone

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Integrating approaches requires more than a division of labour: Comment on Wölfer & Hewstone (2015)

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Wölfer and Hewstone (2015; hereafter W&H) argue that evolutionary psychology (EP) is useful for understanding sex differences in same-sex aggression, while social role theory (SRT) is best applied to sex differences in opposite-sex aggression. W&H tested this proposal using a rich dataset on high school students' peer-reported aggression. They regressed classroom-level sex differences in same- and opposite-sex aggression onto five variables drawn from the two theoretical positions. Three variables (gender and masculinity norms, derived from SRT and body dimorphism, derived from EP) did not differ in their association with the two forms of aggression. Another variable (sex ratio: EP) was not interpretable because it was confounded with number of available targets, leaving a fifth (male hierarchy: EP) predicting sex differences in same-sex but not opposite-sex aggression. Our focus is not on the study itself, but on their proposal that theoretical disputes between EP and SRT can be resolved by assigning one form of aggression to EP and another to SRT. We believe that this argument mischaracterises both theories, reinforces the 'evolutionary vs social' divide, and falls short of integration.

EP theorists often argue that sex differences in aggression arise because of male-male competition, which in turn happens because variance in reproductive success is greater for males than females (Wilson & Daly, 1985). This does not make EP relevant only to male-male aggression. Selection has acted on morphological and psychological traits that facilitate aggression in men or inhibit aggression in women. The result can be viewed as men having a greater 'taste for risk' (Wilson & Daly, 1985) or women having greater fear (Campbell, 1999). Either way, the traits in question are domain-general: they have consequences for sex differences in many forms of risk-taking (Cross, Copping, & Campbell, 2011; Cross, Cyrenne, & Brown, 2013). Consequently, risky physical forms of aggression show robust sex differences, while there is very little sex difference in the use of low-risk indirect aggression (Campbell & Stockely, 2013). (In W&H's study, aggression was operationalized as 'being

mean' to someone, which makes interpretation of sex differences difficult.) Aggression arises from escalated conflicts of all kinds. Males' greater strength and willingness to take risks is relevant in all disputes which could escalate to aggression – not just those with a same-sex opponent. EP has examined opposite-sex aggression with reference to men's mate guarding and paternal uncertainty, and more broadly in terms of the inherent potential for bilateral conflict in long-term pair bonds (see Archer, 2013, for review). W&H's supposition that EP is relevant only to same-sex aggression lacks a clear rationale.

SRT (like EP) aims to explain a broad range of sex-typed behaviours and traits. According to SRT (Wood & Eagly, 2012), gendered division of labour causes gender stereotypes about personality to arise via correspondent inference. These stereotypes foster prescriptive norms which shape men's and women's behaviour in a range of situations. In other words: "[I]nternalized gender roles produce gender identities that act as *trait-like* determinants of aggressive behaviours" (Eagly & Wood, 2009, 276; emphasis added). The term 'trait-like' implies consistency across targets and, indeed, SRT explicitly encompasses same-sex aggression (Wood & Eagly, 2002). The extent to which an individual internalises and conforms to gendered norms should predict aggression across contexts. W&H's proposed application of SRT to opposite- but not same-sex aggression, therefore, neglects the fact that SRT already offers an explanation for sex differences in same-sex aggression. In practice, W&H found that 'masculinity norms' (measured as approval of male violence) were unconnected with sex differences in either same-sex or opposite-sex aggression.

EP and SRT are viewed as competing frameworks because, while both theories aim to explain sex differences in all forms of aggression (see, e.g. Archer, 2009; Eagly & Wood, 2009), they use theoretical approaches that have been crudely characterised as 'nature' (EP) versus 'nurture' (SRT). Encouragingly, both camps have made attempts at integration over the last twenty years. EP has increasingly acknowledged the role of culture, at the micro-level

examining its transmission between individuals, and at the macro-level demonstrating culturally-driven niche construction as a source of genetic selection (Brown, Dickens, Sear, & Laland, 2011). The rigorous investigation of 'content biases' (Boyd & Richerson, 1985) – the shaping of cultural products by the structure of an evolved mind - represents a powerful tool for understanding the creation and transmission of the gender stereotypes so central to SRT. Likewise, SRT's proponents, who initially rejected any role for sexual selection in the genesis of psychological sex differences (Wood & Eagly, 2002) now acknowledge possible 'biological differentiation' in infant temperament, upon which gendered socialisation acts (Wood & Eagly, 2012). The goal of integration is to find a satisfactory means of incorporating 'biological' and 'cultural' predictors within a *single* framework. W&H's proposed 'dual-theory approach' is the very opposite of this.

In pursuit of genuine integration, we suggest focusing on the way in which risk sensitivity is responsive to social context. Risk sensitivity is a trait that differs between men and women (Cross et al., 2011) and one that directly affects aggression levels (Campbell, 2013; 2015; Eagly & Steffen, 1986). Furthermore, the perceived risk associated with aggressive acts depends on social context (sex of target) and cultural prescriptions (differential permissibility of aggression as a function of perpetrator's and target's sex). For example, cultural norms that support male-male fighting as an index of masculinity can make refusal to fight a riskier option than fighting for some men (Hochstetler, Copes, & Forsyth, 2013). Sex differences in intimate partner violence also correlate with cultural acceptance of male violence (Archer, 2006). Note that sex (of perpetrator or target) is not treated as a causal variable in itself (see Maney, 2016). Instead, sex is a proxy measure for variables that affect the risk of aggression (strength, risk sensitivity, internalised beliefs about perpetration and victimisation, etc.).

In summary, we welcome W&H's use of network-based data to investigate sex differences in aggression as a function of sex of target. However, applying evolutionary and social theories in a piecemeal fashion, rather than furthering integration, reinforces an artificial and counter-productive 'evolutionary vs social' dichotomy.

Action Editor

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Author Contributions

C.P. Cross and A.C. Campbell co-wrote this commentary.

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