Original Article

Gender Differences in Human Interpersonal Conflicts: A Reply to Ingram et al. (2012)

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Abstract: In the article, I comment on the study results of Ingram et al. (2012). Feelings of anger were hypothesized to be reported more often in the descriptions of past conflicts of boys than in the descriptions of past conflicts of girls. However, the authors found that boys were no more likely than girls to describe feelings of anger ensuing from a conflict. An explanation of this interesting finding is not provided in the discussion section. The present study provides possible theoretical explanations for this finding, also using the results of our studies published in the past.

Keywords: anger, interpersonal conflict, gender, sex, evolution

Ingram et al. (2012) examined gender differences in pre-adolescent conflicts using semi-structured interviews. Feelings of anger were hypothesized to be reported more often in the descriptions of past conflicts of boys than in the descriptions of past conflicts of girls. However, boys were no more likely than girls to describe feelings of anger following a conflict (Ingram et al., 2012, p. 891). Unfortunately, an explanation of this interesting finding is not provided in the discussion section of Ingram et al.’s paper. The present commentary aims to supplement the discussion of Ingram et al. (2012), and to provide a new theoretical insight into human conflict behavior.

First of all, I would like to distinguish two different domains of anger - emotional experience and emotional expression. The authors' hypothesis about gender differences is based on the statement: "If anger displays serve as a credible signal of a physically aggressive response (Ekman, 1999), then anger might also be less common among females (Frodi, Macaulay, and Thome, 1977)" (Ingram et al., 2012; p. 888). However, the authors tested the variable "feeling of anger," and not the variable "expression of anger." Furthermore, the authors' hypothesis is based on the review of Frodi, Macaulay, and Thome from 1977. However, more recent reviews (Archer, 2004; Archer and Mehdikhani, 2003; Kring, 2000; Trnka and Stuchlikova, 2013) have indicated that males and females do not
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differ in the intensity and the frequency of anger experiences, although males are believed to experience anger more frequently than females (Plant, Hyde, Keltner, and Devine, 2000). These more recent findings are consistent with the similar occurrences of anger feelings detected in the narrations of the boys and girls in Ingram et al.'s study (2012).

Males and females also did not differ in their abilities to recognize the facial expressions of anger. In our previous study, two hundred and one college students ($M = 22.9$, $SD = 5.2$) judged seven different facial expressions on male and female faces (Trnka, Kubena, and Kucerova, 2007). The results showed no difference in the recognition of facial expressions of anger by males and females. Also, facial expressions of anger on a male’s face were not more easily recognized than facial expressions of anger on a female’s face.

The starting point of Ingram et al.'s (2012) hypothesis is based on the gender-specific function of anger display. Previous research has indeed revealed some gender differences in the expressive domain of anger, specifically in the targeting of anger expressions. Females reported that they would express more anger towards males than towards females (Brody, 1993). Generally, males represented a more frequent target of anger than females (Brody, Lovas, and Hay, 1995; Harris, 1994; Kring, 2000), especially when they were unknown to the anger elicitors (Harris, 1994). Men also suppressed their anger responses to their wives more than women did to their husbands (Harburg, Julius, Kaciroti, Gleiberman, and Schork, 2003). Furthermore, females targeted their anger towards their relationship partner, whereas males more often targeted their anger towards unknown males (Harris, 1994). These findings are very stimulating for the theoretical discussion about the possible explanations of such gender differences in the targeting of anger expressions. I propose the following four hypothetical interpretations:

First, sex-specific patterns of anger targeting may be related with the higher interpersonal sensitivity of females. Empirical research revealed that women are more interpersonally sensitive and more socio-emotionally oriented than men (Friedman, 1979; Leppänen and Hietanen, 2001; Madden, Barrett, and Pietromonaco, 2000). Why have such psychological dispositions evolved more in females than in males? Strong social bonds between females would be a part of an effective cooperative system for defense against potential external attackers. The establishment of such cohesive support networks could be advantageous for females in situations when males were not with the group, for example, when they were hunting.

Overt expressions of anger usually have immediate negative consequences for the social bonds between individuals. Females may thus be motivated to avoid potential conflicts with other females because of their higher socio-emotional orientation and interpersonal sensitivity. Therefore, overt anger expressions are more frequently directed towards males, who are less socio-emotionally oriented and less interpersonally sensitive than females.

Second, there is also the possibility that women are not more interpersonally sensitive, but only more sensitive to negative social feedback than men are. The frequency and the intensity of threat displays are regulated by specific regulatory mechanisms in most mammalian societies. "Display rules" govern the appropriateness of human emotional expressions in relation to the context in which they should or should not be used (Ekman
and Friesen, 1969). Individuals acquire these display rules during the process of socialization. Breaking the display rules often causes negative social feedback or the social punishment of the individual.

Strong anger expressions are repressed in most human cultures, as oftentimes they may elicit conflict or even serious physical combat (Trnka and Stuchlikova, 2013). Females are generally more prone to avoid face-to-face confrontation and they rather use indirect forms of aggression (Björkqvist, 1994; Hess and Hagen, 2006). This may be due to the hypothesized females' higher sensitivity to negative social feedback. The motivation to prevent negative social feedback may cause females to more frequently target their anger expressions towards males.

The social sanction model is based on a similar assumption as the above-mentioned explanation, but is more focused on the females' discrepancy with the feminine gender role in relation to the use of direct versus indirect aggression (Campbell, Muncer, and Gorman, 1993; Richardson and Green, 1999). Females are supposed to be less directly aggressive than males, because direct aggression is considered inappropriate behavior for the feminine gender role. This may also explain another result of the Ingram et al. study (2012). Girls were less likely to talk about responding to conflict with physical aggression, and talked more about feeling sad about the conflict and about conflicts in friendships. The girls' narrations might be influenced, however, by gender role appropriateness in the situation where they were interviewed by the researcher.

Previous empirical research has revealed, however, that a part of the female population is masculine or undifferentiated (Frank, McLaughlin, and Crusco, 1984; Hoffman and Fidell, 1979; Johnson and Black, 1981; Jones and Lamke, 1985; Long, 1989; Wong, Kettlewell, and Sproule, 1985; Woodhill and Samuels, 2003). Masculine or undifferentiated females are less influenced by feminine gender role expectations and, thus, the social sanction model is only partly applicable to Ingram et al.'s results (2012).

A third interpretative position may arise from the evolutionary significance of female health. Reproduction is a fundamental factor for species survival, and the good somatic and psychological health of females is a key precondition for successful mating. The maintenance of good female somatic and psychological health is also very important for quality investment in any existing offspring. Females who are less exposed to aggressive signals are less stressed and, therefore, more relaxed for potential courtship and for successful mating. The more frequent targeting of anger towards males could be beneficial for the preservation of female somatic and psychological health.

Conflict encounters including the externalization of anger may sometimes escalate to serious physical combats. Risk of physical combat with males may be perceived as more threatening by females, and it may elicit higher levels of stress in females. This explanation is supported by the results of our recent study. Participants (males = 85, females = 102, $M = 22.6$, $SD = 3.2$) judged 10 various negative emotions: disgust, anger, sadness, fear, contempt, hate, disappointment, jealousy, envy, and guilt. On a 10cm line drawn next to each of the 10 words, participants were asked to rate the degree to which they experienced this emotion as pleasant/unpleasant. Females rated anger as significantly more unpleasant than males (unpublished results, $t = -0.03$, $p = .05$), which indicates that anger may upset
females more than males. This explanation of the gender-specific targeting of anger towards males is also consistent with the parental investment theory (Campbell, 2007; Trivers, 1972).

Fourth, the more frequent targeting of anger towards males could be also related to the frequent conflicts of males within the dominance hierarchy. The male's functioning within the dominance hierarchy is probably connected with the frequent negotiations of rank by way of regular interpersonal conflicts, as well as serious physical combats with other males during hominid evolution. One’s rank in the male dominance hierarchy also influences the rate of access to females, and thus represents an important factor for successful reproduction. The male’s mind as well as body is therefore supposed to be well-equipped for the perception of aggressive signals. Females may simply utilize this higher resilience of males for venting their own stress and excessive tensions. This explanation is supported by the threat model, where males are supposed to be tuned in to potential threats, as well as to be ready to respond aggressively to threats (Richardson and Green, 1999).

Apart from the above-mentioned explanations, I can also mention an alternative view, which is in opposition to the previous line of reasoning. The expression of anger is mostly regarded as a conflictive emotion that harms group harmony and social interactions. However, in some cases, appropriate expressions of anger can be also beneficial for an interpersonal relationship because of the restoration of balance that has been previously disturbed (Pellegrini, 2002; Rieffe and Terwogt, 2006). From this perspective, naturally expressed anger may better settle conflict situations, and it may also reduce interpersonal stress during the development of a social relationship.

In any case, Ingram et al.’s (2012) study provides an interesting theoretical background. For example, the statement "If anger displays serve as a credible signal of a physically aggressive response, then anger might also be less common among females" could be easily rewritten as the following statement: "If anger displays serve as a credible signal of a physically aggressive response, then anger expressions might also be less frequent among females in conflict situations". Such reformulated theoretical rationale is also supported by several previous studies. For example, in the study of Fisher and Evers (2011), females reported more anger suppressions and less anger expressions than males, whereas males reported more direct expressions of anger. Also, in Western societies, there is a general expectation that males usually express their anger more often than females (Fabes and Martin, 1991; Hess, Blairy, and Kleck, 2000; Johnson and Shulman, 1988; Plant, Kling, and Smith, 2004). More frequent anger suppressions in females may be related to the relatively high costs of overt anger expressions. The energy costs of various facial expressions were analyzed in my previous study (Trnka, 2007). The range of structural facial changes, signal duration, duration of communication sequence and of the presence / strength of vocalizations was taken into account in the classification of facial expressions into three categories (cheap, medium, and expensive). Facial expressions of anger, laughter, and surprise were considered to be expensive in comparison to other facial expressions.

The paper of Ingram et al. (2012) is very fascinating and thought-provoking. The
above-mentioned comments are intended to provide an additional source of inspiration for future research. Also, there are more related issues that have not been discussed in the present commentary; for example, gender differences in the frequencies of overt anger expressions in relation to the efficiency of conflict-solving skills. Such issues may be inspiring for future discussions about gender differences in interpersonal conflicts, as well as in the experience and the expression of anger.

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